

**DRINKING WATER PROGRAM**  
**SFY 2009**  
**WEST VIRGINIA DEPARTMENT OF HEALTH AND HUMAN RESOURCES**  
**Guidance and Reporting Checklist-**  
**February 2009**

This Guidance and Reporting Checklist attempts to capture all of the tasks which make up a state's drinking water program. This includes all Primacy elements and other statutory requirements under the Safe Drinking Water Act, and those activities which could be funded with the DWSRF set-aside funds, Operator Certification Expense Reimbursement Grants (ERG) or the state Water Protection Coordination (Security) grants.

This Guidance captures activities for one year as the WVDHHR does not wish to develop a two-year workplan and PWSS application reflecting a two-year budget at this time.

This Guidance links the various aspects of the drinking water program to EPA's Strategic Plan goals, objectives and subobjectives. Example Outputs and Outcomes have been included, but states are encouraged to identify as many Outputs and Outcomes under the various program components as possible.

**Table of Contents for Program Guidance and Reporting Checklist**

1. Focus Activities for **SFY 2009**
2. Activities Required to Maintain Primacy and elements PWSS grant funds can be used for:
  - 2.1 Data Management
  - 2.2 Compliance and Enforcement, including Base Program Primacy requirements
  - 2.3 New Regulation Development
  - 2.4 Surveillance and Technical Assistance
  - 2.5 Program Management
3. DWSRF Activities including statutory requirements for the following three program areas:
  - 3.1 Capacity Development
  - 3.2 Operator Certification Programs
  - 3.3 Source Water Assessment and Protection Program

4. Recommended Activities which are optional, but fundable under PWSS or DWSRF grants
5. Additional State Activities (optional)
6. State Water Protection Coordination (Security) Grant Activities
7. Expense Reimbursement Grant (ERG) Activities

#### **Attachments**

- A. New Rule Adoption and Primacy Application Deadline Dates for States
- B. PWSS Key Performance Measures
- C. **SFY 2009 Calendar (FY 2010 to be provided at a later date)**
- D. Capacity Development Reporting Guidance placeholder
- E. Source Water Program Reporting form

**All reporting is considered to be via the semi-annual self-assessments, unless noted otherwise.**

#### **New Focus Activities for SFY 2009**

These are the activities which need special emphasis during the year due to their importance or due to a regulatory deadline. These are listed here to capture your attention. These activities should not reduce the focus placed on responding to acute health contaminants at all public water systems.

- Continuation of Emergency Preparedness/Increased Security Activities with both state staff and public water suppliers, including responding to threats and emergencies. **Security integration and efforts related to the 10 features of an active and effective security program are also high priorities.**
- New Rule Development and adoption or submission of extension requests. Implementation of new federal rules to the extent possible under state regulations and as per extension or Early Implementation Agreements.
- State specific activities.
- Continuation of Operator Certification Programs and Expense Reimbursement for training.
- Continue to improve quality systems and documentation of these systems, including revisions to QMPs and/or QAPPs as necessary due to the adoption of new regulations.
- Continue to improve data quality in SDWIS.

**The reporting on these activities should be done in the corresponding section of the Checklists.**

**Description of Joint Evaluation Process**

The joint evaluation process will include semi-annual progress reports by the state, including the elements of 40 CFR §§ 35.115 and 31.40-41. EPA will assist the state in the development of a reporting checklist tool, completing the status of any known items for the state. The state will further complete the reporting checklist tool and submit to EPA on a semi-annual basis. EPA will review and provide feedback on these progress reports as quickly as possible. EPA will meet with the state, typically planned for mid-year timeframe, to discuss progress under the grant, any obstacles or short comings and make recommendations to the state for corrective action. EPA will provide all findings in writing to the state and may require the submission of a corrective plan by the state. In the event that resources do not allow EPA to meet with the state, e-mail and telephone discussions will take place to complete this evaluation.

Consistent with the need to be accountable for grant funds, state should identify outputs and outcomes from grant and grant related activities.

## DRINKING WATER PROGRAM GUIDANCE AND REPORTING CHECKLIST

**Goal 2:** Safe and Clear Water--Ensure drinking water is safe. Restore and maintain oceans, watersheds and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife.

**Objective 1:** Protect human health by reducing exposure to contaminants in drinking water (including protecting source water), in fish and shellfish, and in recreational waters.

**Subobjective 1:** Water safe to drink.

**WV contribution to FY'09 Measures:** Goal 2.1.1: 90% of the population served by community water systems (CWS) that receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection. SP-1: 90% of the population served by CWS that receive drinking water that meets health-based standards. SP-2: 95% of person months during which CWS provide drinking water that meets all applicable health-based standards.

**Workplan Component/Program:** PWSS

**Work years:** 2009

**EPA Contacts:** Wanda F. Johnson, SPM/PO  
Anthony Meadows, Team Leader

**State Contact:** Walter Ivey, EED Director

**PRC:** 201B03E

### 2.1 Data Management

**Outputs:** Ensuring accurate and complete data related to inventory, compliance and enforcement activities are provided to EPA in a timely manner, each quarter

### **Task 2.1.1**

Participate in and follow-up to EPA **Data Verification Audit findings**. State will address major findings of the report and **report to EPA on its activities/plans to prevent future occurrences**.

**Outputs/Progress To Date** [Relationship between discrepancies from most recent DV Report (February 2006) with current Action Plan (March 2006) to address those discrepancies.]

A “program review” was conducted in July 2008, formerly known as a Data Verification audit. A draft report was received and jointly reviewed with EPA Region III and comments submitted during this reporting period.

**Future Plans** Next review is scheduled for **2011**.

**Outcomes/Benefits (Lessons learned, if any)** [Discuss any proactive measures to avoid reoccurrence of discrepancies.]

**2. Activities Required to Maintain Public Water System Supervision (PWSS) Program Primacy. See elements of 40 CFR §§142.10, 142.12, 142.14, 142.15, and 142.16.**

**Outcomes:** Implementation of an effective drinking water program as described in the workplan, increasing the knowledge and awareness of water suppliers of drinking water regulations; improved public health protection; increased public awareness of drinking water quality; achievement of compliance with drinking water regulations; measureable progress toward achievement of all outputs.

### **Task 2.1.2** (Activity also notes statutory/regulatory citations)

Maintain a data base management system that accurately tracks the inventory (including routine updates of system information), tracks water quality monitoring information, and calculates monitoring and reporting (M/R) and maximum contaminant level (MCL) violations for all rule implementation priorities. §142.14(c)

### **Outputs/Progress To Date**

The Office of Environmental Health Services (OEHS) updates the system inventory information, as the public water systems (PWSs) make the

changes and provides the information to our district offices (DOs). SDWIS/State Web Release 1 (SSWR1) is used to enter, track, and review water quality monitoring (bacteriological, radiological, and chemical) data. After the monitoring/sampling information is entered, SSWR1 calculates and determines the PWS's compliance with monitoring and reporting and also tracks monitoring schedules and assists in development of regulatory correspondence, when needed. Appropriate violation reports are also run from SSWR1. Then OEHS notifies the PWSs of their respective violations.

#### **Future Plans**

OEHS plans to upgrade to SDWIS/State Web Release 2 (SSWR2) in April 2009, which incorporates the newer rules.

#### **Outcomes/Benefits (Lessons learned, if any)**

We continue to evaluate our procedures to receive and process monitoring/sampling information. OEHS works with our SDWIS contractor to assist with any SDWIS problems.

#### **Task 2.1.3** (Activity also notes statutory/regulatory citations)

Report quarterly (within 45 days of the end of each quarter) all violations and inventory updates for all systems, and for all rule implementation priorities, to the Safe Drinking Water Information System (SDWIS)/Operational Data System (ODS) Also report any problems in reporting to SDWIS/ODS on time. §142.15(a) & (b)

#### **Outputs/Progress To Date**

The current procedure is to run SDWIS FedRep beginning about 30 days after the end of each calendar quarter, review the FedRep error reports and make modifications in SSWR1 to correct the errors. This process is repeated until the 45 days after the end of the quarter. Near the 45<sup>th</sup> day, the completed reports (Inventory, Actions, and Samples) are electronically uploaded to the EPA CDX internet site. No problems in timely reporting to SDWIS/ODS during this reporting period.

#### **Future Plans**

OEHS plans to continue this procedure for the foreseeable future.

#### **Outcomes/Benefits (Lessons learned, if any)**

**Task 2.1.4** (Activity also notes statutory/regulatory citations)

SDWIS/ODS reporting includes the following activities. Particular emphasis should be placed on continuing efforts to improve data quality and reporting in the areas of Nitrate monitoring and reporting (M/R) and MCL violations; Lead and Copper Rule M/R violations; Total Coliform Rule violations and reporting of all enforcement actions.

a. Report all inventory updates with at least all of the mandatory reporting elements that determine grant eligibility. Refer to *Appendix A of the Consolidated Summary of State Reporting Requirements for the Safe Drinking Water Information System (SDWIS)* documentation, for the details on this reporting.

**Outputs/Progress To Date**

Inventory information is entered by DO staff, who are the individuals that primarily discover inventory changes for OEHS. OEHS is currently using SSWR1. Mandatory reporting elements must be entered or an error message is shown to the data entry person, in most instances. Also, when FedRep is used prior to upload to SDWIS/ODS, a completeness and error report may indicate missing data elements. As a result of this process, all mandatory reporting elements for inventory updates are being reported.

**Future Plans**

OEHS will continue to input inventory updates either directly into SDWIS/State or via migration of data through a contractor developed tablet PC field tool that works with SDWIS/State.

**Outcomes/Benefits (Lessons learned, if any)**

SSWR1, in conjunction with FedRep, are excellent tools to use to avoid missing mandatory reporting elements that determine grant eligibility.

**Task 2.1.4** (Activity also notes statutory/regulatory citations)

b. Report all M/R, MCL, Public Notification (PN), and treatment technique violations for all rules including M/R violations for unregulated contaminant monitoring. This activity includes tracking monitoring results, and recording violations for all community water systems (CWS), non-transient non-community water systems (NTNCWS), and transient non-community water systems (TNCWS).

### **Outputs/Progress To Date**

OEHS enters PWS test results and public notification (PN) receipts into SSWR1 as data is received. No sooner than ten days after the end of the applicable compliance period, OEHS personnel generate a pre-compliance violation list (which includes M/R, MCL, PN, and TT potential violations) from the data that has been entered into SSWR1. Designated personnel double check the data, and validate or reject the preliminary violation. A notice of violation (NOV) letter and, if applicable, appropriate PN templates are mailed to the PWS. The violations are reported to SDWIS/ODS on a calendar quarter basis. Unregulated monitoring requirements are directly implemented by EPA; the state role is coordination only.

### **Future Plans**

OEHS plans to continue with the above outlined procedure for the foreseeable future.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 2.1.4** (Activity also notes statutory/regulatory citations)

- c. Report all formal enforcement actions and successfully link them to all appropriate violations.
- d. Report all variances and exemptions.
- e. Report all milestone information required under the regulations.
- f. Report all required SWTR data (e.g., treatment codes for all surface water, purchased surface water, GUDI and purchased GUDI sources, seller's public water system identification (PWSID) number for purchased surface water and purchased GUDI sources, filtration reason codes, etc.).

### **Outputs/Progress To Date**

- When a formal enforcement action is levied against a PWS, a copy of the enforcement document is sent to appropriate OEHS personnel and Federal EPA, if necessary. The enforcement actions are then linked to the violation in SSWR1.
- No exemptions or variances were in effect during this reporting period.
- Milestone information is reported via the quarterly uploads from SSWR1 to EPA/CDX in the Actions module.
- All Surface Water Treatment Rule (SWTR) data is reported via the quarterly uploads from SSWR1 to EPA/CDX in the Inventory module.



### **Future Plans**

The procedures outlined above are proposed to be continued for the foreseeable future. Exemptions, when issued, will be reported to EPA upon issuance.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 2.1.4** (Activity also notes statutory/regulatory citations)

g. Report compliance achieved, identify and correct erroneous data, and submit deactivation data to SDWIS/ODS for all applicable systems, especially Significant Non-compliers (SNCs).

### **Outputs/Progress To Date**

Any PWS that returns to compliance is assigned the appropriate enforcement code in SSWR1. Erroneous data that are found are corrected as soon as possible after discovery, including unwarranted violations that are generated due to the erroneous data. The DO staff promptly enters deactivation data into SSWR1. This information is reported each calendar quarter via the Actions module in the EPA/CDX upload.

### **Future Plans**

The procedures outlined above are proposed to be continued for the foreseeable future.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 2.1.5** (Activity also notes statutory/regulatory citations)

Plan for and make system programming changes to meet any changes to the reporting requirements that will be effective in FY 2009, FY 2010 or FY 2011 (Appendix A of Document EPA-812-B-95-001 summarizes all of the current reporting requirements.) Specifically, plan for SDWIS Modernization, new regulation reporting requirements in sufficient time to meet reporting deadlines of these new rules. Also see Implementation Guidances for each new rule for details on data management/data reporting requirements. §142.15

### **Outputs/Progress To Date**

- OEHS has been reporting via <http://cdx.epa.gov> for multiple years, which is an integral part of SDWIS modernization.

- OEHS staff review Implementation Guidance for each new rule as they become available, and upgrade to the newest version of SDWIS/State that incorporates the reporting elements for the new rules.

### **Future Plans**

OEHS plans to convert to SSWR2 in April 2009.

### **Outcomes/Benefits (Lessons learned, if any)**

Using the most current version of SDWIS/State to the maximum extent possible keeps OEHS up-to-date with new regulation reporting requirements in sufficient time to meet reporting deadlines of new rules.

#### **Task 2.1.6** (Activity also notes statutory/regulatory citations)

Verify and ensure the accuracy of SDWIS/ODS data when SDWIS printouts are made available to the State.

### **Outputs/Progress To Date**

SDWIS/ODS error reports are usually available within a few weeks after the data upload, and errors are usually problems between what is in the State database and what is in the Federal database. OEHS personnel works with EPA Region III personnel to minimize the differences between the two databases.

### **Future Plans**

OEHS plans to continue with the procedures outlined above for the foreseeable future.

### **Outcomes/Benefits (Lessons learned, if any)**

Discrepancies between the State database and the Federal database should decrease over time.

#### **Task 2.1.7** (Activity also notes statutory/regulatory citations)

**LCR unaddressed violations** - Update data on PWSs that received a violation for monitoring or missed milestones and that do not have a follow-up action reported for compliance achieved (i.e., SOX) that is linked to the violation. §142.16(c)(4)

### **Outputs/Progress To Date**

There have been no unaddressed Lead and Copper Rule (LCR) violations during this reporting period.

### **Future Plans**

This rule will continue to be implemented in its entirety for the foreseeable future.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 2.1.8** (Activity also notes statutory/regulatory citations)

Report **Public Notice (PN)** violations on a routine basis where appropriate. §142.15(a)(1)

### **Outputs/Progress To Date**

190 PN violations were issued during this reporting period.

### **Future Plans**

PN violations will continue to be reported and recorded in SDWIS/State for the foreseeable future.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 2.1.9** (Activity also notes statutory/regulatory citations)

For **new rules**, (CCR, PN, M/DBP, LCRMR, Rads, Arsenic, **LT2, S2DBPR, LCRSTR, and GWR**) enter data into SDWIS. States not using SDWIS/State must develop the capability of reporting to SDWIS as per Extension/Implementation Agreements. For new rules which are in effect, but the state does not have Primacy, report information for EPA, Region III to make compliance determinations (see specific reporting needs in applicable Extension or Letter Agreements).

### **Outputs/Progress To Date**

Data is being entered into SSWR1 for all current rules. OEHS tries to upgrade to newer version of SDWIS/State as they become available in order to allow reporting of the new rules. Some aspects of Long-Term 2 Enhanced Surface Water Treatment Rule (LT2), Stage 2 Disinfection By-Products Rule (S2DBP), Lead and Copper Rule Short-Term Revisions (LCRSTR), and Ground Water Rule (GWR) are available within SSWR1.

### **Future Plans**

OEHS plans to convert to SSWR2 in April 2009, well before the new rules mentioned above are fully implemented.

### **Outcomes/Benefits (Lessons learned, if any)**

Keeping current with the most recent version of SDWIS/State allows entering data and transfer of information into SDWIS/Fed.

## **2.2 Compliance and Enforcement including Implementation of all PWSS Program Activities required by 40 C.F.R. §§142.15 & 142.16.**

**Activities are listed by general first and then by National Primary Drinking Water Regulation (NPDWR).**

**Outputs:** Undertaking enforcement program with informal and formal actions; making compliance determinations consistent with federal regulations; developing and delivering training programs for staff and public water suppliers.

### **Task 2.2.1** (Activity also notes statutory/regulatory citations)

Complete **Annual Compliance Report** by July 1<sup>st</sup>, for previous calendar year. Provide report to EPA Washington DC with copy to Region. SDWA Section 1414(c)

### **Outputs/Progress To Date** [\[Provide date of latest compliance report submitted\]](#)

The 2007 Annual Compliance Report was submitted to EPA on June 30, 2008.

### **Future Plans**

The 2008 Annual Compliance Report is expected to be submitted to EPA by July 1, 2009.

### **Outcomes/Benefits (Lessons learned, if any)**

**Task 2.2.2** (Activity also notes statutory/regulatory citations)

**Promote compliance with the regulations.** Notifying all systems of regulatory requirements and responding to questions (this includes CWSs, NTNCWSs and TNCWSs), taking enforcement action against recalcitrant or noncompliant systems, providing technical assistance, and issuing waivers, variances and exemptions, where appropriate.

**Outputs/Progress To Date**

- The compliance officers (COs) responded to at least 675 phone calls during this reporting period.
- The following numbers of enforcement documents were issued: 1,242 NOV letters; 21 Administrative Orders (AOs) without Penalty; 6 Food Permit Suspension Warning letters; and 3 Food Permit Suspension Requests.
- Compliance and Enforcement (C&E) has been working closely with Capacity Development (CD) to identify those PWSs that have a better chance of returning to compliance with assistance or consolidation into a better managed PWS than with enforcement tools.
- DO staff continue to work with their assigned PWSs to address problems before they occur.

**Future Plans**

- An AO with Penalty tool is being developed to strengthen enforcement actions.
- Recalcitrant PWSs appearing on the Significant Non-Compliance (SNC) Report will be noted on our OEHS web site.
- Approximately 1,084 PWSs will receive their 2009 monitoring schedules from the OEHS by January 31, 2009, to remind them of their upcoming sampling requirements.
- In addition to the Food Permit Suspension Requests, C&E will continue to issue Food Permit Suspension Warning letters that alert a PWS to an impending enforcement action if “return to compliance” actions are not quickly implemented. The OEHS will continue to enlist assistance from the local county health departments.
- C&E will continue to develop specific tools to deal with small water associations and businesses that are chronically out of compliance.
- C&E, in conjunction with other OEHS and Office of Laboratory Services (OLS) groups, will continue to develop the Lab Standardization Sheets to minimize test result errors and, consequently, unwarranted violations.

**Outcomes/Benefits (Lessons learned, if any)**

- The Food Permit Suspension Request continues to be a valuable tool in returning to compliance those PWSs that require a food permit.
- The Food Permit Suspension Warning letters save interagency efforts to revoke a permit and appear to have the desired effect of returning most PWSs to compliance.

**Task 2.2.3** (Activity also notes statutory/regulatory citations)

**Maintain records of pertinent State decisions** (e.g., filtration decisions, waiver determinations, public notification provisions). Report to system files all responses to M/R and MCL violations in accordance with escalation procedures as negotiated in the State Compliance Strategy. Report to system files all documentation of informal enforcement activities (e.g. NOV's or any other action with a data field in SDWIS that is not considered formal like an Admin. Order) §142.14

**Outputs/Progress To Date** [Discuss implementation of compliance strategy to address violations during reporting period]

All enforcement documents are maintained for the appropriate retention times with the corresponding system's file in the OEHS's Central File Room.

**Future Plans**

This program will continue to be implemented in its entirety for the foreseeable future.

**Outcomes/Benefits (Lessons learned, if any)**

**Task 2.2.4** (Activity also notes statutory/regulatory citations)

**Provide responses on SNC systems**, on a quarterly basis using the standard format supplied with quarterly lists, to the **Ground Water and Enforcement** Branch. Work with EPA SNC Coordinator to determine why problems are occurring and take steps to correct.

**Outputs/Progress To Date** **[Provide dates of quarterly responses to SNC reports]**

OEHS has been working with the EPA Region III SNC Coordinator on a quarterly basis to determine the status of SNC violations, actions taken/to be taken to return PWSs to compliance, and to determine the best way to reduce the number of PWSs on the SNC report. Enforcement tools and options are routinely discussed to return recalcitrant PWSs to compliance, including Federal and State NOV's, AOs, Food Permit Suspension Warning letters, Food Permit Suspension Requests, and the use of other Agencies. The OEHS is currently working with the EPA to beta test the New SNC Approach tools.

### Future Plans

OEHS will continue to evaluate new tools and procedures to reduce the number of PWSs on the SNC report.

### Outcomes/Benefits (Lessons learned, if any)

#### **2.2.5 Government Performance and Results Act (GPRA) State Reporting Measures and Key PWSS Program Performance Indicators.**

**GPRA Measures:** Reporting is met by reporting the required quarterly SDWIS compliance data or through other reporting already done under other initiatives such as the Source Water Matrix or Wellhead Protection Program reports. For information not already reported to EPA, **reporting frequency is semi-annual.** The following are the GPRA State Core Performance Measures and Associated Reporting Requirements: A - EPA Region III PWSS Key Performance measures - **FY'05** will serve as the baseline for the **FY'09-'10** time frame. See Table in PWSS Guidance, Attachment B. Compliance with many of these measures is tracked in SDWIS. Further reporting is required for measures relating to source water protection and sanitary surveys.

#### **Task 2.2.6** (Activity also notes statutory/regulatory citations)

**SWTR:** Implement the entire rule. (**§141.70-§141.76, subpart H**)

**Report** in semi-annual self assessment the number of GUDI assessments completed and expected timeframe for completion of remainder. Source type changes should be recorded in SDWIS. Deadlines to install filtration must be met.

**Give status** of %s for active/seasonal systems and unresponsive/orphan systems.

### **Outputs/Progress To Date**

For reporting purposes, we have established January 1, 2004 as a benchmark. PWSs that became active or existing PWSs that added new sources after January 1, 2004 are separated and considered new.

Ground Water Under the Direct Influence (GWUDI) Status PWSs Active Prior to January 1, 2004:

Community – 100% Classification – 0 Testing

NTNC – 100% Classification – 0 Testing

NC – 100% Classification – 0 Testing

GWUDI Status PWSs Active January 1, 2004 through December 31, 2008, or existing PWSs adding sources after January 1, 2004:

Community – 2 testing new wells – 1 new system testing

NTNC – 1 testing new wells – 5 new systems testing

NC – 1 testing new well – 7 new systems testing

#### **Future Plans**

New PWSs and sources have been and will continue to be contacted to complete testing. New PWSs and sources for existing PWSs are added to the GWUDI inventory on an ongoing basis.

#### **Outcomes/Benefits (Lessons learned, if any)**

OEHS's goal to achieve 100% testing and evaluations for all PWSs active before January 1, 2004 has been completed.

#### **Task 2.2.7**

**TCR:** Implement the entire rule for all system types.

**Implementation includes:** enforcing routine and repeat monitoring, making compliance determinations, conducting sanitary surveys, and reviewing sample site plans. Enforce additional routine monitoring the month following a positive sample and PN requirements.

**Report** the number of sample site plans reviewed, and discuss any major TCR implementation issues or problems.

#### **Outputs/Progress To Date**

This rule is being implemented in its entirety. Community PWSs have a monthly Total Coliform Rule (TCR) compliance rate of approximately 95%, while non-community PWSs have a quarterly TCR compliance rate of 90% during this reporting period. Sample site plans are reviewed during Sanitary Surveys. See Section 2.4.1 for number of sanitary surveys (number of sample site plans reviewed are the same).

#### **Future Plans**

The OEHS will continue to educate all PWSs on the importance of regularly monitoring for TC whenever possible for the foreseeable future.

#### **Outcomes/Benefits (Lessons learned, if any)**

The monthly and quarterly TCR compliance rates appear to have leveled off at 95% and 90%, respectively.



### **Task 2.2.8**

**Phase II and V Rule for nitrates and nitrites:** Implement the entire rule for all system types. **Implementation includes:** enforcing initial and follow up monitoring, making compliance determinations, and following up on violations.

### **Outputs/Progress To Date**

The Phase II and V rule for nitrates and nitrites is being implemented in its entirety. The M/R compliance rates for quarterly and annual nitrate sampling were 92% and 85%, respectively.

### **Future Plans**

The Phase II and V rule for nitrates and nitrites will continue to be implemented in its entirety for the foreseeable future.

### **Outcomes/Benefits (Lessons learned, if any)**

### **Task 2.2.9**

**Phase II and V Rule for Chronic Contaminants:** Implementation includes making compliance determinations for monitoring that has been conducted, enforcing follow-up monitoring where results are greater than the MCL, and follow-up on MCL violations. States are also encouraged to make development and implementation of waiver programs a priority implementation activity. Enforce follow-up monitoring requirements where results are less than the trigger level. Enforce initial monitoring, and enforce follow-up monitoring where results are between the trigger level and the MCL.

### **Outputs/Progress To Date**

The Phase II and V Rule for Chronic Contaminants is being implemented in its entirety. Standardized lab sheets, for laboratory use, had been under development for some time to minimize data entry errors and, subsequently, unwarranted violation letters being sent to PWSs. Changing the hard-copy lab report formats has been met with resistance from a number of labs. Feedback from specific labs indicated that an electronic data submittal system may offer more potential benefits to all parties involved. Data Management (DM) is currently exploring this avenue as a more

lab-palatable method of data submittal.

**Future Plans**

DM, with support from C&E, will continue to develop a Cross Media Electronic Report Rule (CROMERR) compliant electronic data submittal program that will enable data to be entered in a more accurate, timely manner.

**Outcomes/Benefits (Lessons learned, if any)**

**Task 2.2.10**

**Lead and Copper Rule (LCR)** including the **Minor Revisions** for all PWSs: Implement the entire rule for all systems. **Continue efforts to improve PWS's timely monitoring of lead and copper.** Enforce routine water quality parameter monitoring and additional lead and copper monitoring. Enforce public education for all systems. Report action level exceedances and milestone information to SDWIS.

**Outputs/Progress To Date**

This rule is being implemented in its entirety. Action level exceedances and milestone information is reported to SDWIS/ODS on a quarterly basis. For 2008, the computed compliance rates for the reporting period 6-Month Pb/Cu test and the 2008 annual Pb/Cu test were 88.9%, and 89%, respectively.

**Future Plans**

This rule will continue to be implemented in its entirety for the foreseeable future.

**Outcomes/Benefits (Lessons learned, if any)**

### **Task 2.2.11**

**Stage I DBP:** Continue implementation of the Stage 1 DBP. Ensure that systems update their monitoring plan if they change any of their sampling locations or dates.

### **Outputs/Progress To Date**

The Stage 1 Disinfection By-Product (S1DBP) rule is being implemented in its entirety, except for:

- Generating Total Organic Carbon (TOC) Treatment Technique (TT) violations.
- The 4 ppm chlorine residual MRDL violations.

The reason for the exceptions is due to resource limitations.

### **Future Plans**

An additional CO has been selected for hire to help mitigate the resource problem. The district office staff will be utilized as necessary to assist in violation determination. The SDWIS/State Web Release 1 Program will be evaluated to determine the accuracy of the TOC MRDL compliance evaluation.

### **Outcomes/Benefits (Lessons learned, if any)**

### **Task 2.2.12** (Activity also notes statutory/regulatory citations)

**Interim Enhanced Surface Water Treatment Rule (IESWTR):** Continue implementation of IESWTR. Provide a list of systems that have had a sanitary survey completed during the previous year and an annual evaluation of your state's program for conducting sanitary surveys (§142.15(c)(5)).

**Outputs/Progress To Date**

| <b>PWSID</b> | <b>System Name</b>       | <b>Date Completed</b> |
|--------------|--------------------------|-----------------------|
| WV3302031    | St. Albans MUC           | 09/16/2008            |
| WV3300516    | Weirton Area Water Board | 12/18/2008            |
| WV3303516    | Wheeling                 | 12/19/2008            |

**Future Plans**

| <b>PWSID</b> | <b>System Name</b>                             | <b>Proposed Date To Be Completed</b> |
|--------------|--|--------------------------------------|
| WV3301307    | Lewisburg                                      | 03/08/2009                           |
| WV3300608    | WVAWC/Huntington District                      | 05/2009                              |
| WV3301705    | Clarksburg Water Board                         | 07/10/2009                           |
| WV3304513    | WVAWC/Bluestone Plant                          | 07/19/2009                           |
| WV3301046    | WVAWC/New River Regional Water Treatment Plant | 09/12/2009                           |
| WV3303111    | Morgantown Utility Board                       | 10/19/2009                           |
| WV3301905    | Charles Town Water Department                  | 12/13/2009                           |
| WV3302835    | WVAWC/Bluefield District                       | 02/23/2010                           |
| WV3300202    | Berkeley County PSD/Bunker Hill                | 03/07/2010                           |
| WV3302104    | WVAWC/Weston                                   | 04/04/2010                           |
| WV3302364    | Logan County PSD/Northern Regional             | 05/2010                              |
| WV3304104    | Beckley Water Company                          | 06/18/2010                           |
| WV3300212    | Martinsburg, City Of                           | 08/22/2010                           |
| WV3304011    | Putnam PSD                                     | 09/2010                              |
| WV3302502    | Fairmont, City of                              | 10/31/2010                           |
| WV3300218    | Berkeley County PSD/Potomac River              | 01/08/2011                           |
| WV3302016    | WVAWC/Kanawha Valley District                  | 01/2011                              |

**Outcomes/Benefits (Lessons learned, if any)**

**Task 2.2.13**

**Rads:** Implement the Radionuclides Rule. Work with PWS's, as needed, to ensure they are aware of their regulatory requirements.

Work with the appropriate state agency to identify systems designated as "contaminated" or "vulnerable to contamination" by nuclear effluents and monitor accordingly.

**Outputs/Progress To Date**

This rule is being implemented in its entirety. The Rad M/R (quarterly only) and MCL compliance rates were 15% (29 violations) and 100%, respectively.

**Future Plans**

This rule will continue to be implemented in its entirety for the foreseeable future. The DOs will be notified to contact PWSs that have not been conducting required sampling for RADS.

**Outcomes/Benefits (Lessons learned, if any)**

Most of the non-compliant PWSs are "basket cases" that have limited or no resources. Many have been turned over to CD and other West Virginia (WV) agencies for assistance.

**Task 2.2.14**

**Arsenic:** Implement the Arsenic rule. Work with PWS's, as needed, to ensure they are aware of their regulatory requirements and can meet lower MCL effective January 22, 2006. Initiate compliance agreements with systems out of compliance.

**Outputs/Progress To Date** [Report positive change in population protected by new MCL achievement.]

This rule is being implemented in its entirety. There is only one water system required to complete quarterly monitoring. The quarterly compliance rates for M/R and MCL were 50% (1 violation) and 50% (1 violation), respectively, during this reporting period. The 2008 annual compliance rate compliance was 95%. The DO has been notified to contact the PWS that incurred both violations for Arsenic.

**Future Plans**

This rule will continue to be implemented in its entirety for the foreseeable future.

**Outcomes/Benefits (Lessons learned, if any)** [Report positive change in population protected by new MCL achievement.]

**Task 2.2.15**

**FBRR:** Review plant recycling information during sanitary surveys.

**Outputs/Progress To Date**

| <b>PWSID</b> | <b>System Name</b>               | <b>Date Completed</b> |
|--------------|----------------------------------|-----------------------|
| WV3300806    | Clay-Roane PSD/Procious District | 07/16/2008            |
| WV3304307    | Hughes River Water               | 07/22/2008            |
| WV3304507    | Big Bend PSD                     | 08/05/2008            |
| WV3305402    | Claywood Park PSD                | 08/28/2008            |
| WV3300901    | West Union                       | 10/23/2008            |
| WV3300512    | Follansbee-Hooverson Heights     | 11/06/2008            |
| WV3300508    | Hammond PSD                      | 11/13/2008            |
| WV3300516    | Weirton Area Water Board         | 12/18/2008            |
| WV3303516    | Wheeling                         | 12/19/2008            |

**Future Plans**

Filter Backwash Recycle records will be reviewed at appropriate PWSs during Sanitary Survey inspections.

**Outcomes/Benefits (Lessons learned, if any)**

**Task 2.2.16** (Activity also notes statutory/regulatory citations)

**LT1:** Continue to implement the LT1 Rule. Inform the affected systems of their requirements under the rule and report any violations to SDWIS/ODS. (§142.12).

**Outputs/Progress To Date**

- Monthly Operational Reports (MORs) are submitted by applicable water systems to OEHS, where the turbidity and chlorine residual data are entered into SDWIS/State on a routine basis. The turbidity data is provided to District Offices, where it is entered into the AWOP TURBOPT spreadsheet/graphing program and subsequently reviewed with systems' operators.
- Data Management receives MOR's where the turbidity data is entered into SDWIS.
- OEHS has not yet started issuing turbidity violations due to resource limitations.

**Future Plans**

A new CO has been selected for hire to help mitigate the resource problem. The district office staff will be utilized as necessary to assist in violation determination.

**Outcomes/Benefits (Lessons learned, if any)**

**Task 2.2.17**

**All Other Currently Regulated Chemicals:** Take enforcement actions for all arsenic MCL and M/R violations. Enforce total trihalomethane monitoring and MCL violations. Enforce current radionuclide standards. Enforce monitoring for other contaminants. Enforce against systems with other MCL violations.

**Outputs/Progress To Date**

The SDWIS/State Compliance Decision Support (CDS) Reports are run routinely to identify potential M/R and MCL violations. When violations are verified, NOV letters with PN requirements are sent to the administrative contact and the violations are recorded concurrently in SSWR1, with appropriate enforcement actions electronically linked to the violation.

### **Future Plans**

The OEHS will continue to update CDS reporting and Pre-Compliance evaluations to keep up with any regulatory revisions in SSWR2.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 2.2.18**

**PN Rule:** Include public notification requirements in compliance assistance and enforcement actions that are taken on MCL, treatment technique, and M/R violations following all aspects of Revised PN Rule effective May 2002.

### **Outputs/Progress To Date**

PN requirements are included with each NOV letter addressing MCL, TT, and M/R violations in accordance with the PNR. PN violations are issued and recorded in SSWR1 for failure to perform PN requirements.

### **Future Plans**

This rule will continue to be implemented in its entirety for the foreseeable future.

#### **Task 2.2.19** (Activity also notes statutory/regulatory citations)

Revise the **State Compliance Strategy** to reflect changes in the State and Federal regulations, including revised Penalty Authorities, any new or revised State MCLs, any new SNC definitions, State procedural or organizational changes, and State/U.S. EPA Enforcement Agreements. The revisions should also include updated timely and appropriate flow charts for TCR, total trihalomethane, Radionuclides, Phase 2 and 5, SWTR, Lead Ban, and LCR violations, the CCR rule, IESWTR and DDBP rule, LCRMR, Arsenic, FBRR, LT1, and other new rules when available. The charts should trace the State's response from identification of a violation through the State's most formal enforcement tools to final compliance. §142.11



**Outcomes/Benefits (Lessons learned, if any)Outputs/Progress To Date** [Revised compliance strategy.]

The existing State Compliance Strategy is being reviewed to:

- Update changes in State/Federal regulations.
- To develop a format that will describe work processes, QA/QC tools, enforcement tools, tool development projects, etc., used by OEHS to implement the rule requirements.

During this reporting period, the committee members have been chosen and a meeting held to acquaint them with the project objective.

**Future Plans**

The committee chair will put together a “strawman” outline of the proposed program format using the C&E group information as an example of information to be collected by the other OEHS groups. Meetings will be held to discuss the content and the best format to present the information in the Compliance Strategy document.

**Outcomes/Benefits (Lessons learned, if any)**

The State Compliance Strategy will not only allow EPA to understand how WV implements the rule requirements, but it will also provide the OEHS with an “evergreen” compliance template that can be continually improved through self-examination.

**Task 2.2.20**

**Screen data** submitted by public water systems for evidence of data falsification, and take **follow-up enforcement action** as appropriate.

**Outputs/Progress To Date**

- No enforcement actions were taken during this reporting period. DOs were given access to scanned Monthly Operational Reports (MORs) to review, especially those on the SNC list.
- Staff requested DO take parallel Chlorine (Cl) residual samples for one PWS whose residual readings appeared too consistent over a period of months. For the same date, the DO Cl residual reading was 0.2 ppm versus PWS reading of 1.0 ppm. The operator left soon after, before the DO had a chance to discuss the consistent readings on numerous MORs and the disparity in Cl residual readings.

### **Future Plans**

Emphasis will continue to be placed on identifying discernable data discrepancies on the MORs.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 2.2.21** (Activity also notes statutory/regulatory citations)

**Maintain records** of tests, measurements, analyses, decisions, and determinations performed on each PWS to determine compliance with application drinking water regulations; sanitary surveys, enforcement actions, vulnerability determinations, Public Notice, etc.; make records available to the Regional Administrator upon request. §142.14

### **Outputs/Progress To Date**

All tests, measurements, analyses, decisions, and determinations are currently filed in individual PWS files located in the OEHS Central File Room.

### **Future Plans**

Discussions have been held concerning electronic retention versus paper retention.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 2.2.22** (Activity also notes statutory/regulatory citations)

**Consumer Confidence Report: Implement the CCR Rule (§142.12).** Report on implementation of CCR Rule (§142.15, §142.16(f)). States must report violations and enforcement actions directly to SDWIS by 11/15<sup>th</sup>.

### **Outputs/Progress To Date**

- NOV letters and AOs are issued for late or non-submittal of the Consumer Confidence Reports (CCRs) in accordance with the CCR rule.

PWSs are encouraged to submit their CCR certification form along with the CCR since a significant number of violations occur because the PWS did not submit the certification form by the October 1 date, even though they completed the other required actions. Violations issued for CCR and CCR Certification Form non-compliance numbered 64 and 49, respectively.

- CCRs are being reviewed for timeliness and completeness. Any necessary compliance and/or enforcement actions are taken.

### **Future Plans**

This rule will continue to be implemented in its entirety for the foreseeable future.

### **Outcomes/Benefits (Lessons learned, if any)**

**2.2.23 Consider this a place holder for the Office of Enforcement and Compliance (OECA) reporting measures.** [As far as we know, there are no additional reporting requirements for the States. OECA primarily looks at SNCs, SNCs which have returned to compliance, and those SNCs which are Exceptions. OECA Priorities include implementation and enforcement of microbial rules and Federal enforcement of new rules]

### **2.3 Regulation Development and Authority**

Adopt all rules on schedule as required by §142.12 and any Special Primacy requirements found at §142.16. States are strongly encouraged to adopt rules within the two years deadline to avoid a crunch in future years. Complete all primacy application packages as specified in any applicable memorandum of agreement or extension agreement. Report on any major implementation issues or problems. Apply for extension of time to adopt new regulations within two years of promulgation. Region III prefers **at least a 3 month lead time** to complete Extension Agreements by this deadline. Also see EPA Region III's Binders, mailed to each State as the Implementation Guidances become final (these contain the primacy revisions to specific rules and new primacy requirements to be added as per SDWA 1996).

**NOTE: All rule effective dates, primacy revision package/extension request dues dates are included in Appendix A of the PWSS Guidance Document.**

### **Task 2.3.1** (Activity also notes statutory/regulatory citations)

**Analytical Methods Rule Changes:** Continue to implement the State rules so that these are as stringent as the analytical method changes published on December 5, 1994, March 5, 1997, December 1, 1999, May 15, 2001, October 23, 29, 2002, in the Federal Register. §142.12

### **Outputs/Progress To Date**

WV has adopted all federal rules in 40 CFR 141 by reference as promulgated by April 18, 2007, which includes all of the above analytical method rule changes.

### **Future Plans**

WV plans to adopt all federal rules by reference, whenever feasible, as soon as practical.

### **Outcomes/Benefits (Lessons learned, if any)**

Adopting federal rules by reference has simplified the primacy application process.

#### **Task 2.3.2** (Activity also notes statutory/regulatory citations)

**Maintain required statutory and regulatory authorities** (those upon which primacy approval was based). Report on the status of any State reorganizations, and their effects on statutory or regulatory authorities, and on implementation.

Report on any changes to statutory, regulatory or laboratory certification status of the State Primacy Agency. §142.12

### **Outputs/Progress To Date**

No changes have been made during this reporting period.

### **Future Plans**

No changes are anticipated, other than those necessary to obtain primacy for new rules that may have been promulgated.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 2.3.3** (Activity also notes statutory/regulatory citations)

Prepare for and adopt **Ground Water Rule (GWR)**: Submit Primacy Revision Application or Extension Request to EPA by November 2008 based on November 2006 final rule promulgation. §142.12 and §142.16

### **Outputs/Progress To Date**

Proposed regulatory changes have been submitted to the legislature to be considered for approval in the 2009 session. An extension request for the primacy application was submitted and approved during the reporting period.

### **Future Plans**

A primacy application is proposed to be submitted to EPA Region III in late summer/early fall time frame.

### **Outcomes/Benefits (Lessons learned, if any)**

**Task 2.3.4**(Activity also notes statutory/regulatory citations)

Prepare for and adopt **Lead and Copper Rule Short-Term Revisions**: Submit Primacy Revision Application or Extension Request to EPA by mid 2009. §142.12 and §142.16

### **Outputs/Progress To Date**

Proposed regulatory changes have been submitted to the legislature to be considered for approval in the 2009 session. Due to the timing, an extension request is not anticipated to be needed for these rules.

### **Future Plans**

Spring 2009 – Approval of State Rule changes by the WV Legislature.

Mid-2009 – Submittal of Primacy Application (in conjunction with the GWR).

### **Outcomes/Benefits (Lessons learned, if any)**

**Task 2.3.5** (Activity also notes statutory/regulatory citations)

Prepare for **Radon Rule (anticipated May 2009)**. Identify systems which may have elevated levels and work with systems to reduce risk of exposure. §142.12

### **Outputs/Progress To Date**

No activity on this task during this reporting period, based on the currently anticipated action date by EPA.

### **Future Plans**

Preparation will be implemented when 2011 is nearer.

### **Outcomes/Benefits (Lessons learned, if any)**

[Task 2.3.6](#) (Activity also notes statutory/regulatory citations)

**Prepare for other new regulations** to be promulgated in 2006, 2007, and 2008 with State rule adoption due 2 years later; Specifically for LT2/Stage 2 DBP Rules, conduct early implementation activities as noted in checklists for these Rules. §142.12 and §142.16

### **Outputs/Progress To Date** [Describe implementation activities]

Primacy for these two rules was granted by EPA in this reporting period. IDSE reports began to be received during this reporting period.

### **Future Plans**

DO staff will continue to work with the affected systems to maximize compliance.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **2.4 Surveillance and Technical Assistance**

**Outputs:** Report # or % sanitary surveys and other inspections/visits of water systems; permitting of drinking water facilities to assure that the design and construction of facilities will be capable of compliance with drinking water standards.

**Task 2.4.1** (Activity also notes statutory/regulatory citations)

**Maintain an adequate sanitary survey program.** Document deficiencies found in the surveys and follow-up to correct these deficiencies within the State's authority. Please provide the number of CWSs, NTNCWSs, and NCWSs which are scheduled for sanitary surveys in FYs **2009** and **2010** in the State's workplan and provide an update on the number of surveys completed. Please report on any key survey deficiencies or issues at SNC systems. §142.16

Report in semi-annual self assessment the number of sanitary surveys, **key survey deficiencies or issues** and the number of GUDI assessments completed and expected timeframe for completion of remainder. Give status of %s for active/seasonal systems and unresponsive/orphan systems.

Source type changes should be recorded in SDWIS. Deadlines to install filtration must be met.

**WV contribution to FY'09 Measures: SDW-1a: 91% of CWS in states that have undergone a sanitary survey within the past three years (five years for outstanding performers) as required under the Interim Enhanced and Long-Term 1 Surface Water Treatment Rules.**

**Outputs/Progress To Date**

**# of sanitary surveys conducted at:**

Ground Water CWS = **21**

Surface or GUDI CWS = **41**

NTNCWS = **16**

TNCWS = **30**

Total Number of Sanitary Surveys conducted during this reporting period: **108**

GWUDI Assessment Status: Please refer to Section 2.2.

**Future Plans (Projections)**

OEHS will conduct required number of sanitary surveys per EPA frequency guidelines as follows:

| <b>PWS Type</b> | <b>FY 2009 (midyear)<br/>January 1, 2009 – June 30, 2009</b> | <b>FY 2010<br/>July 1, 2009 – June 30, 2010</b> | <b>FY 2011<br/>July 1, 2010 – June 30, 2011</b> |
|-----------------|--|---|---|
|                 |  |   |   |
| <b>CWS</b>      | 62   | 144   | 155   |
|                 |  |   |   |
| <b>NTNCWS</b>   | 9  | 13  | 28  |
|                 |  |   |   |
| <b>TNCWS</b>    | 15   | 58  | 83  |
|                 |  |   |   |
| <b>TOTALS</b>   | <b>86</b>  | <b>215</b>                                      | <b>266</b>                                      |

**Outcomes/Benefits (Lessons learned, if any)**

**Task 2.4.2** (Activity also notes statutory/regulatory citations)

**Maintain adequate plan and specification review program** to assure that design and construction of new and modified drinking water system facilities will be capable of complying with the drinking water regulations.

Please provide an update on the number of reviews completed, or key problem areas in semi-annual self-assessment. \$142.10

**Outputs/Progress To Date**

|                      | <b>FY 2009 Plan</b> | <b>Mid-Year FY 2009 Actual</b> |
|----------------------|---------------------|--------------------------------|
| Water Plans Reviewed | 300                 | 157                            |
| Water Permits Issued | 200                 | 111                            |

DO staff reviews plans and inputs suggestions for improvements and corrections for deficiencies as part of the plan review.



### **Future Plans**

All newly proposed or revised community water projects are designed and issued a permit to construct facilities meeting design standards.

### **Outcomes/Benefits (Lessons learned, if any)**

OEHS will comply with state statute during the review of all design plans and issue permits for those that meet required federal and state standards.

#### **Task 2.4.3** (Activity also notes statutory/regulatory citations)

**Maintain the capability to respond to emergency circumstances and to ensure provision of potable drinking water under emergency circumstances.** Update Plans as necessary. Please report on any ongoing emergency issues in self-assessment. §142.10

### **Outputs/Progress To Date** [Describe efforts, e.g., revisions to state plan]

- OEHS staff identified as key emergency responders and provided cell phones, pagers, and Global Positioning System (GPS) units.
- OEHS staff participated in classroom and online National Incident Management System (NIMS) and Incident Command System (ICS) training sessions.
- Purchased and distributed special portable radios for each DO. These radios enable emergency communications when cell phones, pagers, and conventional land line phones are inoperable.
- OEHS staff trained in use of special portable radios.
- Summer intern updated the OEHS emergency contact database, which contains PWSs' and local health departments' emergency contact information (July 1 – August 8, 2008).
- Other emergency contact lists updated.
- Staff surveyed community PWSs to determine the existence of pipeline interconnections between PWSs.
- Facilitated the formation of a Steering Committee for the West Virginia Water/Wastewater Agency Response Network (WV WARN).

### **Future Plans**

- Continue providing key emergency responders with cell phones, pagers, and GPS units.
- New staff will participate in NIMS and ICS training.
- Purchase additional special portable radios for use by OEHS staff.
- Train existing and new staff members in the use of special portable radios.

- Summer intern will update the OEHS emergency contact database, including information on PWS pipeline interconnections and backup water sources.
- OEHS emergency responder lists will be updated, when appropriate.
- Continue assessing community PWSs backup power generation capabilities and electrical connection needs until all community PWSs have been sized.
- Maintain emergency preparedness and provide assistance to systems in restoring operations.
- Assist with the formation of WV WARN and support the development and maintenance of mutual aid programs.
- Continue sponsoring emergency preparedness themed workshops for PWS personnel.

#### **Outcomes/Benefits (Lessons learned, if any)**

- Cell phones, pagers, and GPS devices enhance communication between the OEHS emergency responders and other key responders (agency, water systems, law enforcement, and local health departments) during emergencies.
- OEHS staff is prepared to utilize NIMS and ICS principles during emergency situations.
- Portable radios provide a means of emergency communication when cell phones, pagers, and land line phones are inoperable.
- Staff is prepared to utilize portable radios during emergencies.
- Updated emergency contact database and emergency contact lists enhance communication between the OEHS emergency responders, PWS, and/or local health departments during emergencies.
- PWSs effectively utilize temporary backup generators and/or pipeline interconnections when/if needed.
- Potable drinking water can be obtained in a variety of methods and in a timely manner during emergencies.
- Mutual aid programs enhance PWSs' emergency preparedness, response, and resiliency.
- PWS personnel trained in emergency preparedness measures.

**Task 2.4.4** (Activity also notes statutory/regulatory citations)

**Maintain documentation for and implement a Quality Management System** which includes an adequate laboratory certification program. Update the State Quality Management Plan for the PWSS Program. The State **PWSS Quality Management Plan (QMP)** documents the Standard Operating Procedures (SOP) and QA/QC requirements for the laboratory and the PWSS quality assurance systems. The QMP will include management and organization regarding QA, descriptions of technical tools of QA for all program functions including: laboratory certification and SOPs; PWS compliance, inventory and monitoring data; personnel qualifications and training, and other information. This plan is mandatory for all PWSS grant recipients and must be updated annually or as needed.

Submit additional requested documentation for conditional approved plans to make QMPs approvable.

40 C.F.R. §30.54 and 31.45 and EPA Guidance–EPA QA/R-2

**Outputs/Progress To Date**

According to Section 2.6 of EPA Guidance AZ/R-2 (March 2001), plans are applicable for five years. WV QMP/QAPP was approved in 2005. WVDHHR Office of Laboratory Services (OLS) submitted a proposed revision to OEHS for review in early 2006.

**Future Plans**

Additional information will be added, joint meetings will be held with OLS and EED to discuss any contentious issues and resolve. Current goal is to finalize revisions sometime in 2010. EPA has allowed us to combine the QMP and QAPP since at least 1998 (allowable under item 1.2 in both the R-2 and R-5 documents). OEHS is proceeding under the assumption that this will continue to be the case in future submittals.

**Outcomes/Benefits (Lessons learned, if any)**

**Task 2.4.5** (Activity also notes statutory/regulatory citations)

Develop, implement and update documentation for **Quality Assurance Project Plans (QAPP)** for collection, transport and analysis of samples intended for developing information or data to be used for implementation of the PWSS Program. QAPPs are to follow EPA guidance on plan development. QAPPs are not necessary if State PWSS Program staff do not collect any samples in the implementation of the PWSS program. These plans must be updated as needed. 40 CFR §§30.54 and 31.45, EPA Guidance EPA QA/R-5. Review QAPPs of contractors.

**Outputs/Progress To Date**

Please see task 2.4.4

**Future Plans**

Please see task 2.4.4

**Outcomes/Benefits (Lessons learned, if any)**

**Task 2.4.6** (Activity also notes statutory/regulatory citations)

**Establish and maintain a state program for the certification of laboratories** conducting analytical measurements of drinking water; assure availability to the state of laboratory facilities certified and capable of performing analytical measurements of all contaminants.

State Lab should complete PT sample studies and repeating of any analysis that were unacceptable in make-up studies.

**Provide EPA ESC with NELAP certificates of all commercial laboratories.**

§142.10(b)(3) & (4) To the extent possible, place listing of labs on website.

**Outputs/Progress To Date**

- WV's laboratory certification for the drinking water program is located within the OLS within the Bureau for Public Health (BPH). There are two divisions dealing with laboratories, environmental microbiological (EM) and environmental chemistry (EC).
- Proficiency Testing for the EC lab was completed in the first quarter of the year. No make-ups were required in the second half of the year.
- A list of commercial labs (including the EC and EM labs) is published on the OLS website at <http://www.wvdhhr.org/labservices/shared/docs/EnvMicro/waterqualitylabs.pdf>

### **Future Plans**

- The EC lab is making plans to purchase new laboratory equipment, if funding arrangements can be finalized. The new equipment should enhance the laboratory's capabilities for analyzing chemical samples.
- The EC lab plans to perform two on-site evaluations of in-state labs in the last half of SFY 09.
- The EM lab has five on-site evaluations of certified laboratories scheduled in the last half of SFY 09. Based on past experience, it is anticipated they will analyze about 5,000 bacteriological samples during the same time frame.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 2.4.7** (Activity also notes statutory/regulatory citations)

**Unregulated Contaminant Monitoring Rule Cycle 2 (UCMR2)** - Carry out responsibilities under the mutually agreed upon Partnership Agreement (PA). Specifically those activities occurring in SFY 2009.

- Provide sampling and reporting assistance to those water systems performing monitoring of List 1 and List 2 contaminants;
- Ensure that each system's treatment plant location(s) as latitude and longitude is reported to SDWIS; (this is in addition to the street address);
- Assist EPA in obtaining water system compliance through follow-up contact with those systems non-complying. EPA will provide a list of such systems;
- Review monitoring data reported to SDWARS/UCMR;
- Work with Community water systems to include UCMR data in CCRs.
- **Work with CWS and NTNCWSs to include a notification of the availability of the results of PNs.**

### **Outputs/Progress To Date**

DO staff have worked with large PWSs not properly registered in Safe Drinking Water Accession and Review System (SDWARS). All PWSs are now properly registered.

### **Future Plans**

DOs will continue to collect samples for small PWSs through 2010 and OEHS will send out reminder letters to affected PWSs, reminding them of CCR and PN requirements near the end of each calendar year.

### **Outcomes/Benefits (Lessons learned, if any)**

Sampling began at some PWSs in 2008, with DO personnel encouraging/helping the affected PWSs to collect the samples at the appropriate time.

## 2.4.8 Training

### **Task 2.4.8.1** (Activity also notes statutory/regulatory citations)

Leverage both PWSS and DWSRF grant set-aside funding to **increase the amount of training** made available to operators of public water systems. Training on regulations, treatment technologies (particularly small system treatment technologies), security and public education should be stressed. **Quantitative Outputs:** Report on the type and numbers of training courses given.

### **Outputs/Progress To Date**

All required PWS operator certification courses (23 total\*) were provided by OEHS:

- 13 – 1D
- 4 – WD [WV Environmental Training Center (WVETC) contract]
- 1 – Class I
- 1 – Class II
- 0 – Class III
- 4 – Chief Operator [WV Rural Water Association (WVRWA) contract]

\*OEHS uses the 2% set-aside to provide additional water operator certification training courses held by WVRWA. These courses are not included in the above totals, but are listed separately in Section 3.0.1.

Several OEHS staff presented part or all of the following continuing education hour (CEH) courses on drinking water program topics at the WVRWA Annual Conference in September 2008:

- CAPDEV Class
- Operator Rule Changes
- Funding Agencies Panel Discussion
- WV WARN Program Introduction
- EPA's Sustainable Infrastructure Initiative

### **Future Plans**

Continue to offer all required certification courses at various locations across the state several times per year by OEHS staff or through contracts

with other training providers.

**Outcomes/Benefits (Lessons learned, if any)** [ # individuals trained in (subject) leading to improved compliance rates and increased number of trainers.]

A total of 346 individuals trained\* in the following courses leading to improved compliance rates and increased number of trainers:

- 116 – 1D
- 66 – WD (WVETC contract) NOTE: Not all will apply for certification may use for CEH.
- 36 – Class I
- 14 – Class II Water
- 0 – Class III Water
- 114 – Chief Operator (WVRWA contract)

\*OEHS uses the 2% set-aside to provide additional water operator certification training courses held by WVRWA. These course attendees trained are not included in the above totals, but are listed separately in Section 3.0.1.

**Task 2.4.8.2** (Activity also notes statutory/regulatory citations)

**Train State and local PWSS program staff** on new and current regulations and water treatment technologies with a focus on small system treatment technology. EPA Region III will assist wherever possible.

### **Outputs/Progress To Date**

OEHS staff participated in webcasts sponsored by EPA and other organizations. Staff attended, presented, and provided an exhibit at the WV Rural Water Association annual meeting September 2008.

Staff attended regional and national conferences that provided additional information on various topic areas.

### **Future Plans**

Any webcasts or on-site training that OEHS is made aware attendees will be made available.

### **Outcomes/Benefits (Lessons learned, if any)**

Training always benefits the agency in hiring more knowledgeable staff in-house.

## 2.5 Program Management

### **Task 2.5.1** (Activity also notes statutory/regulatory citations)

Prepare DRAFT **SFY 2009 and SFY 2010** grant application workplans which addresses all applicable required grant elements, and submit all required grant forms and supporting documentation. 40 C.F.R. Part 31 & 35

### **Outputs/Progress To-Date** [Submission of grant applications]

SFY 2009 Grant was awarded September 2008.

### **Future Plans**

SFY 2010 PWSS Grant application will be prepared and submitted to EPA by July 30, 2009.

### **Outcomes/Benefits (Lessons learned, if any)**

OEHS will fund its programs which protect public health by regulating drinking water standards.

### **Task 2.5.2** (Activity also notes statutory/regulatory citations)

**Prepare and submit** a final **SFY 2009 and SFY 2010** grant application which addresses all Region III comments on the preliminary draft plan, including all budget documentation and supporting information. 40 C.F.R. Part 31 & 35

Consider two-year applications.

### **Outputs/Progress To Date** [Submission of grant applications]

Please see Task 2.5.1

### **Future Plans**

Please see Task 2.5.1

### **Outcomes/Benefits (Lessons learned, if any)**

Please see Task 2.5.1



**Task 2.5.3** (Activity also notes statutory/regulatory citations)

**Prepare and submit** a semi-annual self assessment which reports State progress in meeting State program plan commitments to the Region. Entails reporting on all activities as identified in the work plan including those performed by the recipient, by contractors and through interagency agreements. **Self assessment shall include:** a progress summary, justification for any outputs not submitted in accordance with the agreed upon schedule, and a discussion of anticipated program problems in the upcoming quarter(s). The first status report should contain a listing of each milestone (output) and their schedule completion dates for all proposals.

It is expected that this document will also serve as a reporting tool. 40 C.F.R. §31.40 and §142.15

**Outputs/Progress To Date** [Submission of 2 semi-annual progress reports in **SFY2009**]

This report is the semi-annual report for the midyear SFY 2009. It contains outputs and outcomes as proposed in the workplan.

**Future Plans**

The PWSS End-of-Year report for SFY 2009 will be submitted to EPA by August 15, 2009.

**Outcomes/Benefits (Lessons learned, if any)**

The semi-annual report provides a tracking system for completion of proposed activities. Periodic reporting brings focus to activities completed and attention to activities not yet completed.

**Task 2.5.4** (Activity also notes statutory/regulatory citations)

All **changes to the approved work plan** must be discussed with the EPA State Program Manager prior to making the change in order to determine if this is a *significant program change* requiring an amendment or other written documentation for the grant award. 40 CFR Part 31 & 35

**Outputs/Progress To Date**

There are no proposed changes to the PWSS workplan.

### **Future Plans**

Any proposed changes will be submitted to EPA for approval.

### **Outcomes/Benefits (Lessons learned, if any)**

Discussion and approval from EPA ensures that our program activities remain consistent and in compliance with the SDWA.

#### **Task 2.5.5** (Activity also notes statutory/regulatory citations)

Provide a **Final Financial Status Report (FSR)** documenting **SFY 2008** expenditures within 90 days of end of budget period. If State elects to apply for a two year budget and project period, **SFY 2009** FSR will be an interim submittal. 40 C.F.R. Part 31

### **Outputs/Progress To Date** [Submission of FSR for **SFY 2008**]

The FSR will be submitted to EPA within the required time period.

### **Future Plans**

State will continue to submit FSR's as required.

### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 2.5.6** (Activity also notes statutory/regulatory citations)

**Maintain records as per §142.14**

### **Outputs/Progress To Date**

All records are maintained in accordance with the above regulatory citation.

### **Future Plans**

OEHS plans to continue maintaining records as required by regulation for the foreseeable future.

### **Outcomes/Benefits (Lessons learned, if any)**

**End of info for PWSS Workplan, although option items #4 and #5 could be listed as well for state to choose from and for tracking purposes.**

### **3 Activities Required to Receive Drinking Water State Revolving Loan Fund (DWSRF) Program Allocation**

**Note:** Section 3 is included in this Generic Program Guidance for additional background information and to help describe the full breadth of the SDWA programs. If any state activity to meet requirements outlined here in Section 3 are funded under the DWSRF set-aside funds, they should NOT appear in the PWSS Program grant workplan. See additional National and Regional Guidance for more details on DWSRF applications/workplans.

**The activities under Sections 3.0 General Provisions, 3.1 Capacity Development, and 3.2 Operator Certification are required to receive the entire DWSRF Program Allocation.** The activities under Section 3.3 Source Water Protection, are not required to receive DWSRF funds. However, if the State wishes to adopt alternative monitoring requirements, the State must have an approved source water protection program, and the State can use DWSRF funds to conduct source water assessments.

**Goal 2:** Safe and Clear Water--Ensure drinking water is safe. Restore and maintain oceans, watersheds and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife.

**Objective 1:** Protect human health by reducing exposure to contaminants in drinking water (including protecting source water), in fish and shellfish, and in recreational waters.

**Subobjective 1:** Water safe to drink.

**WV contribution to FY'09 Measures:** **Goal 2.1.1: 90% of the population served by community water systems (CWS) that receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection. SP-1: 90% of the population served by CWS that received drinking water that meets health-based standards. SP-2: 95% of person month during which CWS provide drinking water that meets all applicable health-based standards. SP-4a: 23% of CWS where risk to public health is minimized by source water protection. SP-4b: 55% of the population served by CWSs where risk to public health is minimized by source water protection.**

### **3.0 General Provisions**

State is required to prepare a plan that identifies the intended uses of the amounts available to the DWSRF Program annually, including Set-aside funds. SDWA 1452(b)(1)

This portion of the Checklist should be used to capture the 2%, 10% and 15% Set-aside funded activities only. The 4% Administrative set-aside and the loan portion of the program are handled by the **Office of Infrastructure and Assistance (OIA)** in Region III and as such, as not covered here unless specifically identified.

**Outputs** are as noted below with each set-aside. **NOTE:** State is required to give “detailed” narrative of work being performed and on the “progress” being made under each funded set-aside. Listing activities in one or two sentences does not give a complete picture. State’s narrative should tell a story, connecting the information from previous reports to current. EPA also suggests including numbers where ever it is feasible ( e.g. # of courses held) and discuss results or effectiveness of activities being performed. Report on expenditures for Set-aside funded activities will be submitted annually in the DWSRF progress report submitted to the Office of Infrastructure and Assistance.

**Outcomes:** Improved operational and/or financial efficiency; improved compliance with NPDWR for systems receiving technical assistance or improved operator performance; attainment of Primacy for new rules (for states using program funds for this purpose); improved data quality (for states using program funds for this purpose); reduced treatment expenses for water systems due to source water protection efforts; improved customer and stakeholder satisfaction; improved efficiency through consolidation or regionalization.

**Task 3.0.1: Technical Assistance 2% Set-aside** [Relationship to On-going Program: Improve understanding of the contribution of set-aside funded activities in supporting other aspects of the State drinking water and ground water programs]

**Goal 1:** Administer the technical assistance program to provide training, enhance public education regarding water issues, and promote long-term viability of small water systems.

**Outputs/Progress To-Date** [Refer to 2% Set-aside Objectives under Goal 1 in DWSRF workplan] **Projection: 2009 Workplan**

| Proposed for Entire Year   | Actual Mid-Year Status  |
|--|---|
| 20 days of continuing education training at regional locations.  | 19 days of continuing education training provided during this report period.  |
| 26 days of certification training at regional locations.   | 10 days of Class 1D or higher certification training provided during this report period.  |
| Educational audio/video aids developed for water system operators.   | A sampling video script is still being developed.   |
| Course manuals and study guides (e.g., math, chemistry) developed and revised to assist water operator training needs. | A Class 1D operator manual was completed. The Class III water operator course manual has been completed. An Advanced Math Handbook for water operators was completed. A sampling video was completed. |
| Exam Database maintenance (for class schedules, operator attendance, and certificate completions information).         | A database with class schedules, operator attendance, and certificate completions is being maintained.  |

|  |  |
|--|--|
| Drinking water library of written resources and videos maintained for water system operators.  | A lending library for audio/visual instructional and informational materials on industry subjects is being maintained. Lending library materials are free of charge to WV PWS personnel.   |
| Website available and maintained with water operator resources.  | WVRWA maintained its website library at the following link: <a href="http://www.wvrwa.org/infocentral/library/library.htm">http://www.wvrwa.org/infocentral/library/library.htm</a> . The homepage allows instantaneous updates on training, schedules, audio/visual items, posting of training materials, and the sharing of general information related to drinking water. |
| Approved annual budget and workplan.   | WVRWA budget and workplan was approved and effective November 1, 2008 through October 31, 2009.  |
| Monthly activity report detailing classes conducted, water system and operator attendance, time diaries, and expenses submitted monthly. | WVRWA provides OEHS with monthly reports on these activities. A comprehensive annual report for Hours for Education and Learning Program (HELP) was also issued. OEHS reviews both the financial and program activities in these reports.  |
| Articles published in trade magazines.   | WVRWA <i>Mountain State Water Line</i> magazine was issued for each quarter of the year.   |

### **Future Plans**

Plans are in place to meet the proposed workplan training activities using WVRWA through the sub-recipient agreement. Start development of a new sub-recipient agreement continuing education workplan with WVRWA to be effective November 1, 2010. OEHS will continue to monitor activities and recommend class changes based on operator needs. Continue to work closely with WVRWA to assure timely completion of deliverables in the new contract.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes] Evaluate the success of work funded by the DWSRF set-asides.

- OEHS believes that the WVRWA contract for this 2% set-aside is an effective use of EPA funds to provide water operator training and meet their certification requirements. Classes taught directly relate to PWS operation, which helps ensure compliance with the SDWA and is supportive of the set-aside outcomes.
- OEHS believes WVRWA is providing a significant amount of CEHs and certification training for water operators throughout the state in regional locations. This regional training minimizes the travel for water operators and makes it accessible to them to maintain or obtain their certification.

**Task 3.0.2: Program Management 10% Set-aside** [Relationship to On-going Program: Improve understanding of the contribution of set-aside funded activities in supporting other aspects of the State drinking water and ground water programs]

**Goal 1:** Support PWSS Program; **Goal 2:** Effective use of SDWIS; **Goal 3:** Improve water system operators' knowledge, skills, and abilities maximizing public health protection, compliance, and system operation efficiency; **Goal 4:** Enhance zone of critical concern (ZCC) and watershed area upstream of a selected water system surface water intake; **Goal 5:** Initiate and implement a performance based training (PBT) program within the EPA's Region III AWOP guidelines.

**Outputs/Progress To Date** [Refer to 10% Set-aside **Objectives under Goals 1-5** in DWSRF workplan]

**Goal 1:** Support the PWSS Program

| <b>Proposed for Entire Year</b>  | <b>Actual Mid-Year Status</b>  |
|--|--|
| Training conducted for State personnel implementing and enforcing new rules.   | Please see Task 2.4.8.2 for status.  |
| Training conducted for public water system personnel complying with new rules.   | Please see Task 4.9 for status.  |
| Violations and/or administrative orders issued for failure to comply with SDWA rules.                                  | Please see Task 2.2.2 for current status.  |
| State legislature approval obtained for revised state rules.   | Revisions submitted to State Legislature for consideration in the 2009 session for PWS rules (GWR & LCRSTR). |
| SDWA regulations primacy maintained.   | Primacy maintained for all rules as of December 31, 2008.  |
| Public Water System Operator Regulations adopted and implemented.  | There were no changes during this reporting period.  |
| Reports completed accurately and promptly.   | All reports submitted promptly and accurately as of December 31, 2008.                                       |
| Concerns or deficiencies identified in the EPA Performance Evaluation Report (PER) addressed concerns or deficiencies. | EPA PER concerns were being addressed during the first half of SFY 2009.                                     |
| Sanitary surveys conducted this year.  | Please see Task 2.4.1 for current status.  |

|  |  |
|--|--|
| District staff reviews permits and plans within requested time frame.  | Please see Task 2.4.2 for current status.                      |
| District staff recommendations made to improve water system operations and correct deficiencies.                   | Please see Task 2.4.2 for current status.                      |
| Complaints investigated promptly.  | Complaints are investigated as soon as possible after receipt. |
| Technical assistance provided to water systems.  | Technical assistance is provided on next visit to the area.    |
| Operators throughout the state receive cross connection control training.  | Please see Task 7.3 for current status.                        |
| Cross connection and back flow prevention plans distributed as requested.  | Please see Task 4.3 for current status.                        |
| Adequate training provided at all water operator courses/back flow tester courses (approximately 5 – 10 per year). | Please see Task 7.3 for current status.                        |

**Goal 2:** Effective use of SDWIS.

| <b>Proposed for Entire Year</b>  | <b>Actual Mid-Year Status</b>  |
|--|--|
| Identified errors reduced from the local and federal diagnostic reports.       | Began addressing errors in the ODS report to WV. Errors are corrected in conjunction with EPA Region III personnel.  |
| SDWIS becomes a more accurate tool.  | SDWIS data accuracy is directly dependent on the input accuracy of DM staff members. Their accuracy is directly correlated with their knowledge and experience, which is increasing. Through quality control, the accuracy should improve.<br>A Data Management Committee (DMC) has been established and meets monthly to address SDWIS and related data issues. |
| The numbers of preliminary violations approach the number of final violations. | The comparison of preliminary violations evaluated and actual violations issued for 2007 – 2008 (July 1 – December 31) showed a decrease from 58.3% to 41.5%, respectively.  |
| Contractor maintains SDWIS Database  | Contract was renewed for FY 2009 and continues to work with OEHS for production improvements.  |
| Number of certified laboratories submitting data electronically increased.     | NODE testing has not been successful as of December 31, 2008. No progress to date.   |

|  |   |
|--|---|
| Data exchange improves data accuracy.            | The Node and Data Exchange are not functional as of December 31, 2008.  |
| Data entry staff focus shifted to data analysis. | We are performing Pre-Compliance checks prior to issuing violations to our PWSs. The Pre-Compliance checks are used as a Quality Assurance (QA) and data analysis tool.<br>A QA database has been created and maintained by the DM supervisor, where at least 20% of the chemical results entered by staff, are checked by comparison of hard copy vs. SDWIS data. This should ensure accuracy of data in SDWIS is improving. |

**Goal 3:** Improve PWS operator's knowledge, skills, and abilities, maximizing public health protection, compliance, and PWS operation efficiency.

| <b>Proposed for Entire Year</b>  | <b>Actual Mid-Year Status</b>  |
|--|--|
| Coalition members provided direction for water operator training.                                      | OEHS relied on feedback from WVRWA in-house staff and OEHS knowledge to establish training needs.  |
| Water Operator Certification program compliant with SDWA.  | Operator Certification Program approved by EPA September 28, 2007. Please see Section 3.2.1 for status.  |
| Certificates issued for each completed course.   | CEH course instructors are required and reminded to provide all course participants with certificates that include the CEH number, course name and number of hours approved.   |
| Maintained operator continuing education requirements and completed courses for certification renewal. | Each operator must submit appropriate CEH documentation as part of renewal requirements using form EW-102D. This information must then be entered in the Safe Water Operator Certification System (SWOCS) database to process a renewal.                 |
| Maintained approximately 2,300 water operator certifications.  | The total number of water operator certifications was overestimated in the approved Drinking Water State Revolving Fund (DWSRF) workplan. There are approximately 2,300 total water operator certifications currently. Please see Task 3.2.1 for status. |
| Submitted continuing education courses reviewed and approved   | The CEH committee schedules monthly meetings, discusses  |



|              |   |
|--------------|---|
| or rejected. | pending course applications, and makes approval/rejection decisions on all CEH applications. Prior to the monthly meetings, the application is circulated to all the committee members and sent to WV Drinking Water Education and Training Coalition (WVDWETC) members for review and comment. This circulation and comment period typically takes between two and four weeks. Please see Task 3.2.1 for more details. |
|--------------|---|

**Goal 4:** Support the Interstate Commission on the Potomac River Basin (ICPRB).

| <b>Proposed for the Entire Year</b>                       | <b>Actual Mid-Year Status</b>  |
|---|--|
| ICPRB activities protected shared drinking water sources. | Participated in and provided funding for the Potomac Drinking Water Source Protection Partnership through the ICPRB. This partnership is composed of water utilities and the various governmental agencies responsible for drinking water protection in the Potomac River Basin. |

**Goal 5:** Oversee and manage the remaining set-aside fund.

| <b>Proposed for the Entire Year</b>                        | <b>Actual Mid-Year Status</b>  |
|--|--|
| All grants used effectively.                               | Please review the supplemental grants funds progress activity report for additional details on status.   |
| Completed evaluation reports used for subsequent projects. | Please review the supplemental grants funds progress activity report for additional details on status.   |
| An effective GIS database developed for water systems.     | Please review the supplemental grants funds progress activity report for additional details on status.   |
| Source water protection activities implemented.            | Grants Program for Surface Water Systems. Please review the supplemental grants funds progress activity report for additional details on status. |
| Source water protection plans improved.                    | Grants Program for Surface Water Systems. Please review the supplemental grants funds progress activity report for additional                    |

|   |   |
|---|---|
|   | details on status.  |
| A contract established helping water systems achieve TMF capacity.                    | Please review the supplemental grants funds progress activity report for additional details on status.  |
| TMF capacity and system needs identified through surveys.                             | Please review the supplemental grants funds progress activity report for additional details on status.  |
| Contractor documented activities and progress reviewed for completion of TMF surveys. | Please review the supplemental grants funds progress activity report for additional details on status.  |
| Source water protection activities implemented.                                       | Contractor Program to implement wellhead source water protection activities. Please review the supplemental grants funds progress activity report for additional details on status. |
| Source water protection plans improved.   | Contractor Program to implement wellhead source water protection activities. Please review the supplemental grants funds progress activity report for additional details on status. |
| Water system facilities will have increased security.                                 | Please review the supplemental grants funds progress activity report for details on status.   |
| All funds used effectively.   | Please review the supplemental grants funds progress activity report for details on status.   |
| Water system's operators received PBT and AWOP mentoring for 18 months.               | Please review the supplemental grants funds progress activity report for details on status.   |
| PBT program water system operator graduation rates increased.                         | Please review the supplemental grants funds progress activity report for details on status.   |

### **Future Plans**

OEHS will continue to implement activities identified in the 2009 workplan to support the state drinking water and ground water programs.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes] Evaluate the success of work funded by the DWSRF set-asides.

See the outcomes listed in the DWSRF FY 2009 Workplan.

**Task 3.0.3: Local Assistance & Other Activities 15% Set-aside** [Relationship to On-going Program: Improve understanding of the contribution of set-aside funded activities in supporting other aspects of the State drinking water and ground water programs]

**Goal 1:** Improve drinking water system viability through continued capacity development program strategy implementation; **Goal 2:** Protect source water from future contamination through Source Water Assessment and Protection (SWAP) and Wellhead Protection (WHP) Programs.

**National Goal:** Continue working towards 2011 goal which states that 50% of CWS and associated population should be protected through substantial implementation of source water protection strategies.

**Outputs/Progress To Date** [Refer to 15% Set-aside Objectives under Goals 1-2 in DWSRF workplan]

**Goal 1:** Improve drinking water system viability through continued capacity development program strategy implementation.

| Proposed for Entire Year   | Actual Mid-Year Status   |
|--|--|
| 18 or more on-site Capacity Development Assessments (CDA) conducted annually.                                    | Please see Task 3.1.2.1 for current status.  |
| Only new PWSs demonstrating technical, managerial, and financial (TMF) capacity are issued construction permits. | All new PWSs provide proper applications including our form EW-100 and a viable budget before any construction permit is issued. These documents demonstrate that a PWS has TMF capacity, is viable, and should be able to sustain itself.                                       |
| Report issued for each CDA assessment.   | Please see Task 3.1.2.1 for current status.  |
| Reference materials and assistance provided to water systems.  | Reference materials distributed at WV Public Service Commission (WVPSC) training, EXPO conference, CDA assessments, and CAPDEV meeting. Conducted one CAPDEV meeting, maintained CAPDEV webpage, worked the WV WARN booth, and provided training at the WVRWA Annual Conference. |
| Contact with each system after assessment to monitor improvements.   | OEHS had telephone follow-up after each CDA. OEHS also provided significant follow-up assistance to 14 PWSs.   |
| Assistance provided to receptive PWSs.   | Provided three, direct on-site PWS assistance visits and provided daily telephone assistance.  |
| Water system assessment questionnaire completed.   | Questionnaires have been completed for each assessment.  |
| Water system baseline ranking list generated.  | An updated 2008 baseline ranking was issued in October 2008.   |

|   |  |
|---|--|
| Baseline assessment completed every three years.  | Baseline assessment was issued in October 2008.  |
| Assessed water systems will have a higher capacity increase over the remaining systems.   | The most recent baseline trends indicate that assessed PWSs have improved capacity versus non-assessed PWSs.   |
| Annual program report summarizing activities.   | Annual report was issued in November 2008.   |
| Governor's report every three years.  | Governor's report was issued in September 2008.  |
| §1420(b)(1) SNC list every three years.   | SNC list update will be completed in July 2009.  |
| Financial and managerial seminars presented at Public Service Commission training and WVRWA conference.                             | WVPSC board member training was conducted in September 2008. Capital Planning/Asset Management training was provided in September 2008 WVPSC Manager's Seminar. OEHS presented two seminars (water loss issues and computerized assistance tools) at the WVRWA conference (September 2008). A CAPDEV meeting was held at the beginning of the WVRWA Annual Conference. |
| Financial and managerial capacity including funding recommendation regarding potential loan recipients communicated to DWTRF staff. | No PWSs were assessed for DWTRF funding during the first half of SFY 2009.   |
| Annual calendar produced and distributed.   | Calendars were produced and 2,000 were being printed at the end of the first half of SFY 2009. The calendar contains upcoming CEH courses for operators.   |
| Cooperative agreements among water system creating improved capabilities.   | Meetings allow interaction and network time among PWSs. Meetings are informal to encourage free discussion of issues and concerns from the PWSs. CAPDEV staff has participated in WV WARN meetings.  |
| TMF tools and information disseminated.   | Various handouts (CIP booklets, magazine articles, etc.) were provided to all attendees. Drinking water operators awarded 2 CEHs for participating in the CAPDEV meetings.   |
| Written meeting summaries compiled and distributed.   | Agendas, attendees list and discussions are posted on CAPDEV page of the OEHS website.   |
| Meetings held throughout the State.   | A meeting was held on September 7, 2008, at Snowshoe, WV during the WVRWA Annual Conference. Additional meetings will be conducted if PWSs request more frequent meetings.   |

|  |  |
|--|--|
| Drinking water information communicated to the public. | Brochures and booklets were available for the public at the WVRWA Annual Conference and will be available at the WV EXPO conference. |
|--|--|

**Goal 2:** Protect source water from future contamination through Source Water Assessment and Protection (SWAP) and Wellhead Protection (WHP) programs.

| <b>Proposed for Entire Year</b>                           | <b>Actual Mid-Year Status</b>  |
|---|--|
| Local efforts create enhanced protection plans.           | Developing grants and contracts to promote source water protection concepts at local level. See Section 3.3.0 and Appendix E for status.   |
| Standardized plans are accessible for interested parties. | <p>Development of a secure website that will provide the wellhead and source water areas, location of public supply wells and potential contaminant sources for use by other utilities, state emergency management, and federal agencies. An interagency agreement has been signed with the West Virginia State GIS Technical Center and the secure website is currently in an internal beta testing process. Internal beta testing continues, will extend to external testers for several months before making the website available to utilities, state emergency management, and federal agencies.</p> <p>Work continues on placing the community source water assessment reports on the OEHS website to provide wellhead and source water areas, potential contaminant sources and susceptibility analysis for use by other utilities, state emergency management, and federal agencies. Discovered a number sequence problem with the potential contaminant sources associated with the maps, problem has been corrected. Web interface has been developed; reports should be displayed on the SWAP website by the first of April 2009.</p> |
| Approved SWAP and WHP plans are developed and used.       | Continue to update the source water protection-tracking database,  |

|   |   |
|---|---|
|   | revisions, protection activities and enhancements to the SWAP/WHP assessments (implemented and/or have substantial implementation status determination) are entered into this database.   |
| Source water information presented at relevant conferences and meetings.                        | See Section 3.3.0 Public Outreach/Educational Activities for status.  |
| Initial and updated source water reports are completed and used.                                | Continue to update the source water protection-tracking database, revisions, protection activities and enhancements to the SWAP/WHP assessments (implemented and/or have substantial implementation status determination) are entered into this database. |
| New assessments and revisions are completed.  | Continue to update the source water protection-tracking database, revisions, protection activities and enhancements to the SWAP/WHP assessments (implemented and/or have substantial implementation status determination) are entered into this database. |
| Informational materials distributed to assist local source water protection efforts.            | See Section 3.3.0 Public Outreach/Education Activities for status.  |
| Sources classified as GWUDI or not-GWUDI.   | See Section 2.2.6 for status.   |
| Correspondence describing treatment requirements based on GWUDI designation.                    | See Section 2.2.6 for status.   |
| Information and ideas exchanged.  | Plan to sponsor or co-sponsor a Water Protection conference in 2009.  |
| Continuing education credit for water plant operators, sanitarians, and professional engineers. | Plan to sponsor or co-sponsor a Water Protection conference in 2009.  |
| Conference proceedings are recorded and available.  | Plan to sponsor or co-sponsor a Water Protection conference in 2009.  |
| Inspection and inventory data transferred between agencies.                                     | OEHS continues to fund the Department of Environmental Protection (DEP) Underground Injection Control (UIC) Class V program. During this period, the DEP UIC Class V program inspected 110 sites with 41 sites having underground injection               |

|  |   |
|--|---|
|  | systems with a combined total wells of 54.  |
| Quarterly report summarizing program activities sent to OEHS.      | OEHS continues to receive a quarterly report summarizing UIC activities.  |
| High quality maps produced.  | GIS continues to be used to prepare maps; displaying geographic, geologic, and monitoring data in support of source water/wellhead protection. GIS is a fundamental tool used to support the delineations, inventories, and susceptibility analyses required by the SWAP. |
| Accurate location information is available from GPS data.          | Staff continues to receive GPS data associated with the public wells and correct when necessary.  |
| Spatially related data used for source water protection and SDWIS. | GIS continues to use the spatially related data to prepare maps displaying geographic, geologic, and monitoring data in support of source water/wellhead protection.  |

**Goal 3:** Provide oversight and management of remaining set-aside funds.

| <b>Proposed for Entire Year</b>  | <b>Actual Mid-Year Status</b>  |
|--|--|
| Offer technical assistance grants to private and public community water systems. Offer planning and design grants to private and public community water systems.   | Please review the supplemental grants funds progress activity for details on status. |
| Award and monitor grant work.  | Please review the supplemental grants funds progress activity for details on status. |
| Review and reimburse eligible costs.   | Please review the supplemental grants funds progress activity for details on status. |
| Review project report and final payment request.   | Please review the supplemental grants funds progress activity for details on status. |
| This grant creates a comprehensive Global Position System (GPS) inventory of water system infrastructure. Build comprehensive Geographic Information System (GIS) mapping for public water systems. Enable municipalities and PSDs to analyze GIS data for their respective systems. | Please review the supplemental grants funds progress activity for details on status. |

|   |  |
|---|--|
| An effective GIS database developed for water systems.  | Please review the supplemental grants funds progress activity for details on status.   |
| Provide grants to groundwater community PWSs to establish and implement source water protection programs. | Please review the supplemental grants funds progress activity for details on status.   |
| Source water protection activities implemented.   | Grants Program Groundwater Systems. Please review the supplemental grants funds progress activity for details on status.   |
| Source water protection plans improved.   | Grants Program Groundwater Systems. Please review the supplemental grants funds progress activity for details on status.   |
| A contract established helping water systems achieved TMF capacity.                                       | Please review the supplemental grants funds progress activity for details on status.   |
| TMF capacity and system needs identified through surveys.   | Please review the supplemental grants funds progress activity for details on status.   |
| Contractor documented activities and progress reviewed.   | Please review the supplemental grants funds progress activity for details on status.   |
| Source water protection activities implemented.   | Contractor Program to implement wellhead source water protection activities. Please review the supplemental grants funds progress activity report for details on status. |
| Source water protection plans improved.   | Contractor Program to implement wellhead source water protection activities. Please review the supplemental grants funds progress activity report for details on status. |
| A complete UMI course curriculum is developed and available for use.                                      | Please review the supplemental grants funds progress activity for details on status.   |
| All funds used effectively.   | Please review the supplemental grants funds progress activity for details on status.   |
| Water systems' operators received PBT and AWOP mentoring for 18 months.                                   | Please review the supplemental grants funds progress activity for details on status.   |
| PBT program water system operator graduation rates increased.   | Please review the supplemental grants funds progress activity for details on status.   |

### **Future Plans**

CDA staff has had a vacant position for the entire period. The Program Manager retired in November 2008 and another staff member is retiring at



the end of January 2009 (actions necessary to announce and fill these three positions is underway). At current staffing, OEHS may fall short of completing the 18 CDAs for SFY 2009. CAPDEV will continue providing follow-up assistance with PWSs receiving CDAs once the vacant positions are filled.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]. Evaluate the success of work funded by the DWSRF set-asides.

Please see the outcomes listed in the DWSRF FFY 2009 Workplan.

### **3.1 Capacity Development**

**Background Notes:** The State had until September 30, 1999 to obtain legal authority or other means to ensure that all new CWSs and new NTNCWSs that commence operation after October 1, 1999, demonstrate technical, managerial, and financial (TMF) capacity with respect to the NPDWRs. Twenty percent of a State's allotment would have been withheld beginning October 1, 1999 for FY'00 funds. In the fiscal years following a state's initial documentation of a fully functional program, a state must document that it is requiring a demonstration of technical, managerial, and financial capacity by every new CWS and every new NTNCWS to avoid withholding of 20% of its DWSRF allotment. 1452(a)(1)(G)(i) and 1420 (a), and page 15 of the February 28, 1997 DWSRF Guidelines.

The State had until August 6, 2000 to develop and begin implementing a strategy to assist existing PWSs in acquiring and maintaining technical, managerial, and financial capacity, otherwise 10% of the FY '01 DWSRF funds allocated to the State would have been withheld. In the fiscal years following a state's initial documentation of a fully functional program, a state must document that it is implementing its strategy to avoid withholding of 20% of its FY'03 DWSRF allotment and in each subsequent year. 1452(a)(1)(G)(i) and 1420 (c), and page 16 of the February 28, 1997 DWSRF Guidelines.

#### **3.1.1 Capacity Development Authority (New Systems)** SDWA Section 1420

The state's program will be evaluated annually as of October 1<sup>st</sup>. The withholding occurs at the time of the DWSRF award for those FY funds.

#### **Task 3.1.1.1**

Annual Review and Reporting on New Systems Demonstration of TMF: A state must document that it is requiring a demonstration of technical, managerial, and financial capacity by every new CWS and every new NTNCWS.

Documentation could consist of summary statistics regarding the number of new CWSs and NTNCWSs and the results of their required capacity demonstrations. Documentation should also address methods used to evaluate and verify program implementation.

**Each semi-annual progress report should include:** (1) The # and list of approved new CWSs and NTNCWSs; (2) Compliance status of new CWSs and NTNCWSs that commenced operation after 10/1/99.

See Appendix D "U.S. EPA Region III Reporting Criteria for Annual State Capacity Development Program Implementation Report." The Attachment describes the reporting criteria for the Report.

#### **Outputs/Progress To Date** [1 Annual Capacity Development Program Implementation Report (due by 11/30<sup>th</sup> each year)]

Capacity Development Program (CDP) Annual Report was completed and submitted to EPA Region III by November 30, 2008. New systems program status was provided in the annual report.

#### **Future Plans**

The next CDP Annual Report will be issued by November 30, 2009. It addresses the on-going impact of the new PWSs program (overall) and the increased new PWSs education and guidance.

#### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

Our permitting system continues to eliminate or consolidate new PWSs, where practical. The four new PWSs that we are tracking were in full monitoring compliance during the first half of SFY 2009. The CDP is providing increased, more pro-active new system monitoring requirement, education, and guidance (intended to address non-compliance with monitoring requirements).

#### **3.1.2 Capacity Development Strategy (Existing Systems)**

1452(a)(1)(G)(i) and 1420 (c), and page 16 of the February 28, 1997 DWSRF Guidelines. **Background Notes:** A state must document that it is implementing its strategy to avoid withholding of 20% of its DWSRF allotment in subsequent years.

### **Task 3.1.2.1**

**Annual Review and Reporting** for Existing Systems implementation: **Each year, as a stand-alone submittal; as part of the semi-annual self assessment; or as part of the state's capitalization grant application,** the state must provide documentation showing the ongoing implementation of their capacity development strategy. **Such documentation may consist of** a concise narrative description of the major activities being conducted and planned for under the state's capacity development strategy.

### **Outputs/Progress To Date** [1 Annual Capacity Development Program Implementation Report (due by 11/30<sup>th</sup> each year)]

The CDP Annual Report was completed and submitted to EPA Region III by November 30, 2008. Three CDP PWS assessments/reports were completed or underway during this reporting period. This is less than was projected due to a shortage of staff. Our program had a CDA staff member vacancy and the Program Manager retired. Now another staff member has retired and will leave in January 2009. OEHS maintains its compliance with the mandatory CDA assessments such as those PWSs obtaining a DWTRF loan.

### **Future Plans**

OEHS will fill the vacant positions as soon as possible to maintain our program.

### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

Data shows our existing PWS's assessment activities are having a positive impact on PWSs. Most PWSs are addressing some portion of the OEHS recommendations, although generally, these tend to be the easier recommendations.

## **3.1.3 Other Annual Reviews and On-going Reporting Requirements:**

### **Task 3.1.3.1**

**Submit, and periodically update,** a list of CWSs and NTNCWSs that have a history of significant noncompliance (SNC) and, to the extent practicable, the reasons for their noncompliance. (This activity repeats every three years – **Next List Due July 15, 2009**) SDWA 1420(b)

### **Outputs/Progress To Date**

The Safe Drinking Water Act (SDWA) §1420(b)(1) requires periodic updates and evaluations of Community and Non-transient Non-community PWSs on the Historic SNC list. The periodic update is due every three years. The most recent Historic SNC List evaluation was submitted to EPA on July 12, 2006, as required by the SDWA. No action or outputs are due this reporting period.

### **Future Plans**

The next report will be prepared and submitted by August 6, 2009.

### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

The number of non-compliant PWSs should continue a favorable downward trend provided new requirements are not implemented.

#### **Task 3.1.3.2**

The State must **submit a report to the Governor** on the efficacy of the strategy and progress made toward improving the technical, managerial, and financial capacity of PWSs in the State. The report shall also be made available to the public. (This activity repeats every three years – **Next Report Due September 30, 2011**)

### **Outputs/Progress To Date**

The Report to the Governor was completed in September 2008 and is available on the OEHS website at [http://www.wvdhhr.org/oehs/eed/i&cd/Documents/GOVERNORS\\_REPORT-2008.pdf](http://www.wvdhhr.org/oehs/eed/i&cd/Documents/GOVERNORS_REPORT-2008.pdf).

### **Future Plans**

The next report will be prepared and submitted by September 30, 2011.

### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

A key finding in the report is that viable PWSs continue to have at least five times the population of the failing PWSs. Many of these small PWSs are managed by volunteers or may not have any management. These small PWSs do not have the economies of scale that large PWSs can achieve.

## **3.2 Operator Certification Programs**

**Task 3.2.1 [Relationship to On-going Program:** Improve understanding of the contribution of operator certification program activities in supporting other aspects of the State drinking water and ground water programs]

To avoid a 20% SRF withhold, States must continue to implement Programs that meet the baseline requirements of the Guidelines and provide Annual Program Reports as per EPA Guidance memo dated 10/15/2001. **Reports due June 30<sup>th</sup> each year.**

### **Outputs/Progress To Date**

- A total of 613 water operators were certified or recertified and certificates were issued.
  - 252 – 1D
  - 59 – OIT
  - 30 – WD
  - 102 – Class I
  - 86 – Class II
  - 54 – Class III
  - 30 – Class IV
- A total of 32 CEH courses (113.3 hours) were reviewed by the CEH committee.
  - 28 CEH course applications approved.
  - 2 CEH course applications rejected.
  - 2 CEH course applications pending.
- Continued to Chair and actively participate with the Drinking Water Exam Review Committee (DWERC) to develop relevant operator certification training and exams. The DWERC meets monthly. During the reporting period, the DWERC:
  - Revised the current 1D exam and developed 3 separate versions.
  - Reviewed both versions of the current Class I exam and developed 3 new versions.
- WV Operator Certification Program annual report was submitted on July 27, 2008 to EPA and approved on September 29, 2008.
- Posted new 1D, Class I, Class II, and WD course manuals and a basic math manual electronically on the OEHS website to improve operator training resources and availability.
- No *Drips and Drops* newsletter to all water and wastewater operators was published due to staffing changes.

### **Future Plans**

- Continue to develop and issue relevant operator certification exams with the DWERC.
- Continue to approve relevant operator training courses with the CEH committee.
- Post new Class III/IV course manual and advanced math handbook on the OEHS website.
- Work towards biannually publishing *Drips and Drops* newsletter again.
- Work more efficiently with, and improve, our operator certification databases.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes] Evaluate success of work.

### **3.3 Source Water Assessment and Protection Activities**

**Background Notes:** Source water assessments are required of primacy States, if the State chooses to adopt alternative monitoring requirements under 1428(b). DWSRF funds can be set aside to administer or provide technical assistance through source water protection programs.

#### **Task 3.3.0**

Implement State Source Water Assessment Program (SWAP) Plan, and **report progress and relevant activities underway**. Include copies of contract agreements, MOUs, etc. with other agencies and contractors as per DWSRF Grant Condition. Discuss any significant barriers to implementation with EPA as soon as possible.

#### **The Strategic Measures are:**

- a)** # and % of population and community water systems (or source water areas) that will achieve minimized risk to public health by substantial implementation, as determined by the state, of source water protection actions in a source water strategy.
- b)** # and % of community water systems (or source water areas) that have a protection strategy in place.
- c)** # and % of community water systems (or source water areas) that have implemented some aspect of a protection strategy.

Report this information using the Source Water Assessment and Protection Reporting matrix (Attachment E).

SDWA 1453(a)(3) & GPRA

#### **Outputs/Progress To Date**

Note: As of June 30, 2005, the SWAP Program has completed assessments for 100% (delineation through public availability) of the community and non-community PWSs that were in existence at the time the program was approved in November 1999. PWSs active after November 1999 are currently being assessed.

Highlights during this reporting period:

- The Wellhead Protection/Source Water Protection Program Annual Report was completed and submitted as required in September 2008. See Appendix E.
- Public Outreach/Education Activities continues:
  - Continued participation with the WV DEP Project WET (Water Education for Teachers), a nonprofit water education program for educators and young people ages 5 – 18.

- July 3, 2008 – Staff presented geology and source water protection topics at the Morris Memorial Summer Camp.
- July 7, 2008 – Staff presented and participated at the ORSANCO SWAP meeting in Portsmouth, Ohio to discuss developing protection plans for surface water PWSs along the Ohio River.
- September 2008 – Provided an exhibit at the WVRWA Annual conference.
- September 18, 2008 – Staff presented a paper concerning the West Virginia Source Water Protection Program and participated at the 2008 Karst Conference in Martinsburg, West Virginia.
- September 26, 2008 – Participated in the annual Water Festival, which consists of hands-on water-related activities with approximately 200 local 4<sup>th</sup> and 5<sup>th</sup> grade students.
- October 21, 2008 – Staff presented a day long course on source water protection program and water wells for sanitarian training.
- The SWAP program continues to develop a program to loan groundwater models to schools or watershed groups that complete the Project WET training or are interested in groundwater protection. Three groundwater flow models have been loaned out to date, two to Kanawha County teachers and one to a watershed association from Monroe County active in public education including summer water workshop for school-aged children. A utilization survey form has been sent to the model users to determine how the models are being utilized in a classroom setting and possible revisions to the program.
- The OEHS website continues to provide information on the SWAP/WHP programs and guide municipalities, water suppliers, or other groups through developing a local SWAP program. The OEHS website contains fact sheets, new SWAP posters, general information and an updated online SWAP educational course, “A Guide to Developing a Source Water Protection Plan.” The SWAP website is regularly reviewed and updated, which provides PWSs and the public additional access to information.
- Provide educational materials, posters, and brochures concerning the SWAP/WHP program.
- Continued to participate in the Alternative Monitoring Strategy Program (AMSP), which determines future monitoring frequency reductions and is dependent on having a SWAP/WHP program in place.
- Continued to implement the revised regulations and design standards for private water wells, approved on April 2, 2008, for the protection of groundwater. The following meetings and presentations at the Sanitarian Training In-Service on Water Wells were held to help implement the revised rules. Meetings were held at Beckley, Bridgeport, Parkersburg, and Snowshoe, West Virginia. In addition, staff attended the Midwest Well Program Managers Meeting in Kansas City, Missouri, and the National Water Well Jubilee in Myrtle Beach, South Carolina.
- Evaluation of new PWS water wells or intakes to assure they are located in areas where contamination threats are minimal. Permits for new public water wells now require an initial survey for potential sources of contamination within 2,000 feet of proposed well location with site-specific information used when available.
- Provided grants through the Source Water Protection Grants Program to surface water and ground water community PWSs to establish and implement water protection programs. Please review the supplemental grants funds progress activity report for additional details on status.

- An expression of interest (EOI) contract for implementing wellhead and source water protection activities has been developed and currently being negotiated with a vendor for work in our St. Albans and Wheeling District Office areas. Two additional EOI contracts have been sent to the Department of Health and Human Resources and State Purchasing to cover the remaining community PWSs in the remaining WV DOs. Please review the supplemental grants funds progress activity report for additional details on status.
- Contract has been signed with USGS, WVDEP, and West Virginia Geological Survey to study the hydrologic flow in abandoned coal mines in McDowell County. Please review the supplemental grants funds progress activity report for additional details on status.

### **Future Plans**

- Updated the Zone Critical Concern (ZCC) and watershed delineation software program used in the Source Water Protection program. Currently reviewing the potential updates with the West Virginia University (WVU) and preparing the contract. Currently waiting for the development of higher resolution West Virginia DEM maps to be developed within the next three to six month period.
- Continue participation and provide funding for the Potomac Drinking Water Source Protection. This partnership is composed of water utilities and the various governmental agencies responsible for drinking water protection in the Potomac River Basin.
- Continue participation in the ORSANCO Water Source Protection program. This partnership is composed of water utilities and the various governmental agencies responsible for drinking water protection in the Ohio River Basin.
- Development of a yield and drawdown guidance and procedural manual for private and public water wells. Discuss development of the guidance and procedural manual with the Water Well Advisory Committee before developing a contract.
- Continue to participate in the AMSP, which determines future monitoring frequency reductions and is dependent on having a SWAP/WHP program in place.
- Planning is ongoing for setting up meetings with the educational officials within Berkeley and Morgan counties to schedule meetings in the spring of 2009 to determine interest and utilization of the groundwater models.
- OEHS will continue to fund the DEP UIC Class V program.
- Planning and scheduling the 2009 Source Water Conference technical meeting.

### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

- DEP UIC Class V program inspected 110 sites with 115 sites requiring corrective actions, such as plugging floor drains.
- Quarterly reports are received from DEP.
- AMSP waivers were reviewed for Berkeley County.
- 15 well permits were reviewed during this reporting period and submitted to the permitting department.
- A total of \$271,925 with 16 PWSs has been awarded for the Source Water Protection and Wellhead grant projects during 2007 and 2008 grant years.



- A total of \$490,766 with 17 PWSs has been awarded for the Source Water Protection and Wellhead grant projects during 2009.
- A source water website counter indicated that during this reporting cycle, the website was accessed 681 times.

See Appendix E for Strategic Measure A (the # and % of population and community PWSs [or source water areas] that will achieve minimized risk to public health by substantial implementation, as determined by the state, of source water protection actions in a source water strategy) as of September 2008).

### **Task 3.3.1**

Coordinate with Clean Water Act programs to promote development of TMDLs or WQS that protect drinking water sources.

### **Outputs/Progress To Date**

- OEHS staff continues to have a working relationship between the State's SDWA program and the Clean Water Act programs (TMDL and the WQS programs) at the WVDEP to help provide the most accurate and representative assessment of the states source waters.
- Staff attended the DEP Riparian Areas Resources and Strategies conference, December 3, 2008, at Morgantown, WV.

### **Future Plans**

Continue to attend Clean Water Act program (TMDL and WQS) meetings.

### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

- 4. Recommended Activities** (These are activities that do not affect PWSS Primacy or the receipt of Drinking Water State Revolving Funds Set-aside funds. However many of these activities could be funded under either program. **Include only those activities to which the state is committing to conduct in the specific grant work plan.**)  
**Goal 2:** Safe and Clear Water--Ensure drinking water is safe. Restore and maintain oceans, watersheds and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife.  
**Objective 1:** Protect human health by reducing exposure to contaminants in drinking water (including protecting source water), in fish and shellfish, and in recreational waters.  
**Subobjective 1:** Water safe to drink  
**WV contribution to FY'09 Measures:** **Goal 2.1.1: 90% of the population served by community water systems (CWS) that received drinking water that meets all applicable health-based drinking water standards through effective treatment and source water**

protection. SP-1: **90%** of the population served by CWS that received drinking water that meets health-based standards. SP-2: **95%** of person month during which CWS provide drinking water that meets all applicable health-based standards. SP-4a: **23%** of CWS where risk to public health is minimized by source water protection. SP-4b: **55%** of the population served by CWSs where risk to public health is minimized by source water protection.

#### **Task 4.1**

Enter informal enforcement actions (e.g. NOV's or any other action with a data field in SDWIS that is not considered formal like an Admin. Order) to SDWIS to present more complete picture of violation follow-up.

#### **Outputs/Progress To Date** [Discuss informal actions taken that have been entered into SDWIS]

NOV's, PN's requested and PN's received are routinely entered into SSWR1. The NOV's are discussed in section 2.2.2.

#### **Future Plans**

The NOV's, PN's requested and PN's received will continue to be entered into SSWR1 for the foreseeable future.

#### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

#### **Task 4.2**

Enter or correct latitude/longitude information to SDWIS for any remaining systems. Enter or correct the information on surface water systems first. Priorities for entering data for the remaining systems are groundwater CWSs next, then groundwater NTNCWSs, followed by TNCWSs. Coordinate, as appropriate, with the EPA data management staff to ensure that all needed data storage capabilities for source water protection efforts are accounted for in the modernized EPA STorage and RETrieval system (STORET), EPA's data management program for ambient water quality. Also coordinate with State Clean Water Act and EPA staff to strengthen State georeferencing capabilities to better track monitoring information for mapping and GIS applications. GIS tools, including the Reach File 3 system that assigns unique location identifiers to the waters of the U.S., will be valuable in source water assessments.

### **Outputs/Progress To Date**

Latitude and Longitude data in SDWIS is 99% complete. Continue to add new water well sources to SDWIS as they become active. OEHS continues to share source water polygon data with the EPA for use by all federal agencies as the single source of data.

### **Future Plans**

Continue to enter Latitude and Longitude data for new sources as necessary.

### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

#### **Task 4.3**

**Develop and maintain a Cross Connection Control Program. §142**

### **Outputs/Progress To Date**

- OEHS is maintaining a database of certified Backflow Prevention and Assembly Inspector(s)/Tester(s) (BPAIT). OEHS provides information on certified BPAITs through a website (<http://www.wvdhhr.org/oehs/backflow/default.aspx>) that is searchable by county and the individual's last name, alphabetically. This website also includes a Cross Connection Fact Sheet, Cross Connection and Backflow Prevention manuals issued by OEHS and EPA.
- OEHS continues to be the primary agency for implementing and maintaining cross connection and backflow prevention programs for PWSs as defined by WV Legislative Rule 64CSR15 and 64CSR25. OEHS acts as an information resource by providing a generic information booklet containing all the necessary information required for a PWS to establish and to maintain a cross connection and backflow prevention program. This information is supplemented by the WV EW-114 "Cross Connection and Backflow Prevention Manual" and EPA 816-R-03-002 "Cross Connection Control Manual."
- DOs continue to monitor PWSs for their "Cross Connection and Backflow Prevention Programs/Plans" and report their findings in a Sanitary Survey. The sanitary survey provides information for correcting deficiencies and non-compliance. Over the past five-plus years, OEHS has provided cross connection and backflow prevention plans to any PWS that did not already have a plan in place. These plans were mailed out to PWSs requesting them in the earlier years; and in later years, the plans were distributed by DO staff during sanitary surveys. The plans now are provided on an "as requested" basis since the requirement has been in place for so long.
- Two week-long initial certification courses and two, one-day refresher certification courses were held for BPAITs. (Contract with WVETC). A total of 44 BPAITs certified or recertified and certificates were issued.

### **Future Plans**

- OEHS plans to maintain our status as an information resource and to continue to monitor PWSs by sanitary surveys and CDAs. Also, OEHS will continue to participate in the class room training for water operators, BPAITs, and sanitarians. On-site assistance will be provided as per request by PWSs.
- The WVPSC mediates complaints between PWSs and their customers. OEHS will continue to work closely with the WVPSC concerning cross connection and backflow complaints.

### **Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

- Our generic “Cross Connection and Backflow Prevention Program/Plan” has proven to be a valuable tool to a great number of PWSs in the state. Also, our participation in class room settings, on-site visits, sanitary surveys, and CDAs, which are outreach programs, have increased the awareness of community PWSs as to their legal responsibilities and for the necessity to implement and to maintain a cross connection and backflow prevention program.
- Face-to-face contact with water operators and BPAITs result in greater cooperation and accomplishes the desired outcome. Also, closer cooperation between OEHS and the WVPSC has been recognized as a need because of fundamental differences in interpretation of each others’ rules and regulations and both agencies’ overall philosophical approach to cross connection and backflow prevention concerns. We also work closely with the WVRWA to enhance their outreach and training programs.

### **Task 4.4**

**Interact with other State programs, local governments, and other stakeholder groups** that affect or are affected by the drinking water program (e.g., wellhead protection programs, watershed protection programs and the Potomac River Basin Drinking Water Source Protection Partnership).

### **Outputs/Progress To Date**

Building partnerships-Inter-Agency cooperation and other alliances:

- Continuation of the SWAP/WHP Memorandum of Understanding (MOU) that has been signed by a number of state ground water regulatory agencies, establishes a coordinated effort by all agencies to protect ground water in delineated SWAP/WHP areas. The MOU enhances the SWAP/WHP program’s ability to protect ground water utilized by public water systems.
- Provide funding for the WV DEP UIC Class V program to locate UIC Class V wells in source water protection and sensitive hydrological areas within WV. This work also includes an inventory of underground and above ground storage tanks in the SWAP/WHP area.
- Provided funding and participation with the Potomac Drinking Water Source Protection Partnership. This partnership is composed of

water utilities and the various governmental agencies responsible for drinking water protection in the Potomac River basin.

- Participated on the ORSANCO SWAP committee that is composed of water utilities and the various governmental agencies responsible for drinking water protection in the Ohio River basin.
- Continuing a working relationship between the federal *Safe Drinking Water Act* and the *Clean Water Act* programs within the state to provide the most accurate and representative assessment of source waters, based on available data which the state believes best reflects the quality of the resources.
- Use hydrogeologic information from the US Geological Survey (USGS) to help define SWAP/WHP areas. Working with the USGS, using existing and new information to help characterize the hydrogeologic setting and develop mathematical simulation of ground-water flow models of different regions of WV to determine the degree of detail appropriate for the source water assessments.
- Assist in educational and outreach efforts in developing and prioritizing protection measures in conjunction with local drinking water protection efforts.
- Improve cooperation and coordination between state agencies and federal programs with localized and statewide conferences and meetings.
- Evaluate Federal EPA's "New SNC Approach" proposal as part of the State Drinking Water Program Administrator Group to input recommendations to EPA.
- Staff attended the DEP Riparian Areas Resources and Strategies conference, December 3, 2008, at Morgantown, WV.

#### **Future Plans**

- OEHS will continue to build inter-agency cooperation per current progress to date.
- Continue to interact with other State programs, local governments, and other stakeholder groups that affect or are affected by the drinking water program (e.g., wellhead protection programs, watershed protection programs, and the Potomac River Basin Drinking Water Source Protection Partnership) by continuing to develop partnerships and alliances.
- OEHS plans to continue the efforts to coordinate source water and source water assessments.
- Continue to use current information on the hydrology and hydrogeology within WV to determine the degree of detail appropriate for the source water assessments.

#### **Outcomes/Benefits (Lessons learned, if any)**

Development of a local protection program is an important part in order to provide monitoring relief to a water system.

#### **Task 4.4.0**

**Plan for source water protection and source water assessment programs simultaneously.** For example, use current information on the hydrology and hydrogeology of different regions of the State to determine the degree of detail appropriate for the source water assessments. These assessments are necessary to support the source water protection programs being considered. Protection programs will likely be necessary in order to provide local flexibility on monitoring relief, ground water disinfection, regulation of Class V underground injection control wells, and filtration.

#### **Outputs/Progress To Date**

- Working with the USGS, using existing and new information to help characterize the hydrogeologic setting and develop mathematical simulation of ground-water flow models of different regions of WV to determine the degree of detail appropriate for the source water assessments.
- WHPP and SWAP helps guide local drinking water protection efforts and awareness by helping to prioritize protection efforts and program resources.
- Assist in educational and outreach efforts in developing and implementing protection measures. Improve cooperation and coordination between state agencies and federal programs with localized and state wide conferences and meetings.
- OEHS continues to help fund the DEP UIC Class V program.

#### **Future Plans**

- OEHS plans to continue the efforts to coordinate source water and source water assessments.
- Continue to use current information on the hydrology and hydrogeology within WV to determine the degree of detail appropriate for the source water assessments.

#### **Outcomes/Benefits (Lessons learned, if any)**

Development of a local protection program is an important part in order to provide monitoring relief to a water system.

#### **Task 4.4.1**

**Participate in State implementation** of the 305(b) guidelines for drinking water to elevate awareness of drinking water as a designated use within the 305(b) program, increase the percentage of waters assessed for drinking water use support, and enhance the accuracy and value of the assessments. Facilitate a working relationship between the State drinking water and clean water staff to provide the most accurate and representative assessment of source waters, based on available data which the State believes best reflects the quality of the resource. Adopt the Watershed approach. Work with State water quality standard staff to ensure that use designations under the Clean Water Act reflect the location of surface source water areas for drinking water intakes, and wellhead protection areas which may be influenced by surface water (i.e., induced infiltration of surface water into drinking water wells). Be sure upstream dischargers are aware of downstream drinking water intakes. Also, work cooperatively with State ambient monitoring staff, including the 305(b) staff, to ensure that duplication of monitoring efforts in source water assessment projects are not occurring, that existing data are recognized and used, and that any new data that are collected are appropriate. EPA Region III will assist in the use of STORET data as needed.

#### **Outputs/Progress To-Date**

- OEHS staff continues to build a working relationship between the State's SDWA program and the water quality standards program at the DEP and the Clean Water Act program to provide the most accurate and representative assessment of source waters, based on available data which the State believes reflects the quality of the resource.
- The OEHS website continues to provide information on the SWAP/WHP programs and guide municipalities, water suppliers, and other groups through developing a local SWAP program.
- OEHS participates with the USGS and DEP on the ambient groundwater monitoring program.

#### **Future Plans**

Development of a secure website that will provide the wellhead and source water protection areas, locations of public supply wells, and potential contaminant sources for use by state and emergency management, federal agencies and utilities.

#### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 4.5**

**Coordinate with national, State, and local agencies** to encourage identification and reporting of waterborne disease outbreaks associated with drinking water.

#### **Outputs/Progress To Date**

Continual communication with the Public Health Sanitation Division, Office of Epidemiology and Health Promotion, Centers for Disease Control and Prevention and Local Health Departments concerning common areas of work, including potential waterborne disease outbreaks. No known waterborne disease outbreaks were reported during this reporting period.

#### **Future Plans**

Continue communication and process of working with these agencies to encourage identification and reporting of waterborne disease outbreaks associated with drinking water.

#### **Outcomes/Benefits (Lessons learned, if any)**

#### **Task 4.6**

**Encourage systems to optimize their treatment plant performance beyond current requirements.** (Participation in Partnership for Safe Water and/or Area Wide Optimization Program)

#### **Outputs/Progress To Date**

- OEHS sent two participants to the AWOP regional planning meeting/workshop at EPA Philadelphia headquarters, July 15 and 16, 2008.
- OEHS sponsored the US EPA Region III's Area Wide Optimization Program (AWOP) meeting/workshop at Cacapon State Park, Berkeley Springs, WV, October 15 and 16, 2008. OEHS had ten personnel attend and participate.
- Community surface water systems' (conventional filtration) statewide data were updated (status component) based on turbidity goals (0.10 NTU, 95% of time – finished water goals and appropriate settled water goals). Informal review of significant deficiencies and various measures of compliance were periodically reviewed to formally generate a 2008 year status component Feb/March 2009.
- OEHS participated in three AWOP Performance Based Training (PBT) conference calls/meetings in order to arrange using grant set-aside money for having an existing EPA vendor start-up the PBT operator training series.



- OEHS has integrated additional field personnel in the multi-state AWOP functions and meetings.

### **Future Plans**

OEHS will focus on AWOP ranking letters to the PWS's and WV's initial attempt at PBT. Details include:

| <b>WV – AWOP Related Schedule 2009 - 2010</b>                                 |   |                    |
|---|---|--------------------|
| Proposed West Virginia Performance Based Training Project Schedule Activities |   |                    |
| <b>Approximate Dates</b>  | <b>Activity</b>                           | <b>Status</b>      |
| March – April 2009  | Site Selection                            | Current EPA vendor |
| April 3, 2009   | Final Site Selection Conference Call      | Current EPA vendor |
| March 31 – April 1, 2009  | Facilitator Training Session (Charleston) | Current EPA vendor |
| May 12, 2009  | PBT Session 1 (Chief Logan State Park)    | Current EPA vendor |
| July 28, 2009   | PBT Session 2 (Chief Logan State Park)    | Current EPA vendor |
| July 29, 2009   | PBT Session 3 Prep – PAI only             | Current EPA vendor |
| November 3, 2009  | PBT Session 3 (Chief Logan State Park)    | Current EPA vendor |
| January 26, 2010  | PBT Session 4 (Chief Logan State Park)    | Current EPA vendor |
| May 11, 2010  | PBT Session 5 (Chief Logan State Park)    | Current EPA vendor |

| <b>Other WV-AWOP Integrated Activities Meeting Dates</b> |   |                                 |
|--|---|---------------------------------|
| <b>Approximate Dates</b>                                 | <b>Activity</b>   | <b>Status/initials/comments</b> |
| January 28, 2009   | Discuss PBT at central office training/meeting                            |                                 |
| February 25, 2009  | Observe Prestonsburg, Kentucky PBT #3                                     |                                 |
| March – April 2009                                       | WV – AWOP scorecard and Turb-OPT summary compilation                      | Meet to review program.         |
| March 31 – April 1, 2009                                 | Facilitator Training Session PAI to perform at central office (see above) |                                 |
| April 10, 2009   | Send WV-AWOP letters to PWSs  |                                 |
| April – May  | American Water AWOP presentation  | Pre-run of AWWA presentation    |
| April 14 – 15, 2009                                      | EPA-Region III, Regional Meeting, Baltimore                               |                                 |
| May 18 or 19, 2009                                       | WV AWWA Conference, Beckley   | AWOP/Partnership seminar        |
| July 14 – 15, 2009                                       | National AWOP Meeting, Cincinnati, OH                                     |                                 |
| October 20 – 21, 2009                                    | EPA Region III, Regional Meeting, Pennsylvania                            |                                 |

WV-AWOP Program focus for the 1.5 years will be on a successful PBT series.

**Outcomes/Benefits (Lessons learned, if any)**

- Optimization concepts, principles, and methods-of-operation being taught/transferred in the PBT series (i.e. special studies, enhanced communication, and troubleshooting) also directly applies to different units of OEHS as a whole.
- OEHS can graphically represent a statewide improvement in Combined Filter Effluent since data compilation began in 2004. OEHS also can show improvement each year, graphically optimized.
- OEHS can better allocate scarce resources to PWSs that are in the “High Public Risk” category of the yearly microbial status component master list.
- Lesson Learned: Presentation of yearly state/district AWOP awards has been the best vehicle to promote optimization goals and concepts. These are a great starting point for dialogue.

**Task 4.7**

**Perform public education responsibilities**, such as responding to press inquiries, educating the general public, and conducting outreach.

**Outputs/Progress To Date**

- OEHS partners with the DEP Water Training Program to train public school teachers and students about drinking water issues.
- Participate in various meetings and conferences across the state to present information on the Source Water Protection Program.
- Exhibit at various conferences and every known appropriate public meeting to provide information to the general public.
- Maintained the OEHS internet website with current information.
- Responded to press inquiries concerning public water systems.
- Answering technical questions from the general public, upon request.
- July 3, 2008 – Staff presented geology and source water protection topics at the Morris Memorial Summer Camp.
- September 26, 2008 – Staff participated in the annual Water Festival, which consisted of hands-on water related activities with approximately 200 local 4<sup>th</sup> and 5<sup>th</sup> grade students.

**Future Plans**

- Continue to collaborate with the DEP Water Training Program to train public school teachers and students about drinking water issues.
- Sponsor or co-sponsor a Water Protection Conference in 2009.

- Continue to exhibit at various conferences to provide information to the general public and water operators.
- Continue to update the OEHS website.
- Continue to respond to press inquiries concerning PWSs.

#### **Outcomes/Benefits (Lessons learned, if any)**

##### **Task 4.8**

**Improve communications with other agencies, and outreach to the public.** Maintain computer communications with field offices.

**Outputs/Progress To Date** [Discuss any changes/improvements made or being done to enhance communications]  
Please refer to Sections 3.2.1, 3.3.0, 4.4.1, and 4.9 concerning internet access with other agencies and to the public.

##### **Future Plans**

Please refer to Sections 3.3.0 and 4.4.1.

#### **Outcomes/Benefits (Lessons learned, if any)**

##### **Task 4.9**

**Track the following compliance assistance activities:** small system assistance programs, workshops, onsite assistance, guidance on State regulations and other outreach materials, hot lines or other responses to inquiries from individuals, trade shows, and conferences.

**Note:** The Office of Enforcement and Compliance Assistance at Headquarters is interested in State compliance assistance efforts. Please provide whatever information is easily available, or that does not require extensive time and resources to collect. (This type of information should also be included in the State's Annual Compliance Report, due each July 1 for the previous calendar year.)

##### **Outputs/Progress To Date**

- Presented an overview of the promulgated PWS Operator Regulation (64CSR4) and upcoming regulations (GWR, LCRSTR) and an overview of the WV WARN system at the WVRWA Annual Conference in September 2008.

- OEHS conducted one CAPDEV meeting and maintained an informational booth at the WVRWA Annual Conference in September 2008.
- Answered telephone and e-mail inquiries concerning the drinking water program.
- DOs were assigned to contact the applicable PWSs, especially those on the SNC list, to advise them of their violations and offer possible remedies to bring them back into compliance. Representatives from CD were also deployed to PWSs in violation (inclusive of special town hall meetings) to explore available options and provide guidance to result in their return to compliance.
- Participated on the ORSANCO SWAP committee that is composed of water utilities and the various governmental agencies responsible for drinking water protection in the Ohio River basin.
- Continued of the SWAP/WHP Memorandum of Understanding (MOU) that has been signed by a number of state ground water regulatory agencies, establishes a coordinated effort by all agencies to protect ground water in delineated SWAP/WHP areas. The MOU enhances the SWAP/WHP program's ability to protect ground water utilized by public water systems.
- Provided funding and participated with the Potomac Drinking Water Source Protection Partnership. This partnership is composed of water utilities and the various governmental agencies responsible for drinking water protection in the Potomac River basin.
- Assisted in educational and outreach efforts in developing and prioritizing protection measures in conjunction with local drinking water protection efforts.
- Improved cooperation and coordination between state agencies and federal programs with localized and statewide conferences and meetings.
- Used hydrogeologic information from the US Geological Survey to help define SWAP/WHP areas. Working with the USGS, using existing and new information to help characterize the hydrogeologic setting and develop mathematical simulation of ground-water flow models of different regions of the State to determine the degree of detail appropriate for the source water assessments.
- Evaluate Federal EPA's "New SNC Approach" proposal as part of the State Drinking Water Program Administrator Group to input recommendations to EPA.
- Staff attended the West Virginia Department of Environmental Protection Riparian Areas Resources and Strategies conference, December 3, 2008, at Morgantown, WV.

### **Future Plans**

- CAPDEV plans to sponsor two meetings per year for PWSs, if staff vacancies are filled, to discuss issues and provide networking contacts.
- Continue to track compliance assistance activities by reviewing and tracking workshops, compliance assistance tools, telephone assistance, onsite visits, and small system assistance programs.
- OEHS staff plans to give presentations at the WVRWA Annual Conference in September 2009.
- Continue to assign SNC and chronic violators to district engineers and CD for contacting and offering assistance relative to specific improvement issues and/or alternatives to result in bringing them back into compliance.

**Outcomes/Benefits (Lessons learned, if any)**

- The participating PWS representatives have found the CAPDEV meeting to be useful to build networking relationships with other PWS's personnel. This networking has enabled PWS personnel with common goals to share experiences and offer assistance to those in need. The ultimate goal would be to have PWSs approve mutual aid agreements in the event of an emergency.
- DO and CD involvement has resulted in certain PWSs returning to compliance or developing a plan and commencing efforts to return to compliance.

**Task 4.10**

**Water Conservation Guidelines:** On August 6, 1998, EPA published a document entitled "*Water Conservation Plan Guidelines*." These voluntary guidelines will encourage conservation by water systems, particularly small systems, thereby extending the life of water treatment infrastructure and reducing costs.

The guidelines do not contain any federal requirements; however, after August 6, 1999 states may require water systems to submit a water conservation plan consistent with EPA's guidelines as a condition of receiving a loan from a State Drinking Water Loan Fund.

**Outputs/Progress To Date**

WV does not require "Water Conservation Plan Guidelines" from DWTRF Loan applicants.

**Future Plans**

OEHS will initiate this requirement when water conservation is required by the state.

**Outcomes/Benefits (Lessons learned, if any)** [Provide numerical results, i.e., as result of "Progress" . . . ]

Not applicable at this time.

#### **Task 4.11**

**Drought Contingency and Water Supply Assistance:** Continue to monitor water systems affected by drought conditions to ensure an adequate supply of water. Assist water suppliers with obtaining alternate sources, handling any contamination associated with the drought, development of contingency plans and assisting with outreach efforts on water conservation.

#### **Outputs/Progress To Date**

- PWSs were surveyed for potential and existing drought conditions during low rainfall periods and offered assistance in obtaining emergency water tankers and other supplemental supplies.
- Three PWSs experienced water shortages due to drought conditions and were offered assistance.
- Several PWSs reported low source water levels. None requested technical assistance.
- Emergency response plans of drought vulnerable PWSs were reviewed for drought planning during sanitary survey inspections. Recommendations were suggested when needed.

#### **Future Plans**

- OEHS will assist PWSs likely to be impacted by drought conditions as they occur and provide assistance to emergency services offices when needed.
- Continue advising PWSs of their need for appropriate backup water supply planning and recommend pipeline repairs to reduce water losses.
- Continue offering assistance to PWSs which are vulnerable to inadequate water supplies.

#### **Outcomes/Benefits (Lessons learned, if any)** [Provide numerical results, i.e., as result of “Progress” . . . ]

##### **5. Additional State Activities which are funded with PWSS Grant or DWSRF Set-aside fund monies:**

Include here narrative on any additional projects funded under the PWSS Grant or with DWSRF Set-aside funds (e.g., lab certification issues and violations reported in annual compliance report). You may also use this area to give narrative on staffing and GUDI, track equipment purchases, etc. or do so on a separate page as in previous reporting periods.

**WV contribution to FY’09 Measures:** **Goal 2.1.1: 90% of the population served by community water systems (CWS) that receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection.**  
**SP-1: 90% of the population served by CWS that received drinking water that meets health-based standards. SP-2: 95% of person**

months during which CWS provide drinking water that meets all applicable health-based standards. SP-4a: **23%** of CWS where risk to public health is minimized by source water protection. SP-4b: **55%** of the population served by CWSs where risk to public health is minimized by source water protection.

**Task 5.1 (Narrative on Staffing Vacancies)**

**Report** on status of staff level and document source of funding for each FTE (e.g., PWSS, SRF, etc.)

**Outputs/Progress To Date**

See accompanying staffing report.

**Future Plans**

OEHS will continue working towards fully staffing the office.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

**Task 5.2 (Narrative on activities conducting GUDI determinations)**

**Report** on issues/concerns, challenges to completing GUDI determinations

**Outputs/Progress To Date**

See Task 2.2.6 for current status.

**Future Plans**

See Task 2.2.6 for future plans.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

## **6. Water Protection (Security) Coordination Grants**

**Separate Guidance is issued regarding these grants. This section of the checklist can be used to list the activities funded so that the Checklist can be used for reporting purposes.**

**Goal 2:** Safe and Clear Water--Ensure drinking water is safe. Restore and maintain oceans, watersheds and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife.

**Objective 1:** Protect human health by reducing exposure to contaminants in drinking water (including protecting source water), in fish and shellfish, and in recreational waters.

**Subobjective 1:** Water safe to drink

**WV contribution to FY'09 Measures:** **Goal 2.1.1: 90% of the population served by community water systems (CWS) that receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection.**

**SP-1: 90% of the population served by CWS that received drinking water that meets health-based standards. SP-2: 95% of person months during which CWS provide drinking water that meets all applicable health-based standards.**

**Outcomes:** Improved protection of critical infrastructure; increase state preparedness, response, and recovery capabilities; increased state coordination, communication and information sharing capabilities; changes in management and operation of water systems based on training; increased awareness of water utilities, general public, local police and emergency responders, and others of the areas of concern from public water system perspective. **NOTE:** State is required to give “detailed” narrative of work being performed and on the “progress” being made under each funded set-aside. Listing activities in one or two sentences does not give a complete picture. State’s narrative should tell a story, connecting the information from previous reports to current. EPA also suggests including numbers where ever it is feasible ( e.g. # of courses held) and discuss results or effectiveness of activities being performed.

### **Task 6.1**

#### **S&T Emergency Preparedness**

#### **Outputs/Progress To Date**

- OEHS hosted a drinking water security/emergency preparedness exhibit at the WVRWA Annual Conference in September 2008. Staff provided security and emergency preparedness information in a variety of formats.
- Additional “DO NOT TAMPER” warning signs distributed to PWSs for posting at their facilities.

#### **Future Plans**

- OEHS will continue hosting its drinking water security/emergency preparedness exhibit during future WV RWA annual conferences and



- other appropriate drinking water industry events.
- Continue developing and distributing security and emergency preparedness outreach materials, utilizing various formats.
- Consider sponsoring additional emergency preparedness workshops/drills for PWS personnel.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

- PWS personnel obtained security and emergency preparedness (including pandemic influenza) knowledge through information offered during exhibits and presentations.
- PWS were protected against unauthorized intrusions and/or efforts to damage or contaminate their water supply through posting “DO NOT TAMPER” warning signs and other protective measures.
- Consumers’ drinking water protection enhanced through proactive security and emergency preparedness measures.

**Task 6.2**

**STAG Emergency Communication**

**Provide additional information on state efforts re: WV WARN as well as the status of the overall progress being made by the utilities to the extent that you are able.**

**Submit progress activity report covering July 1, 2007 – June 30, 2008 that reflects financial status and time schedule for expending all grant funds by the end of the project period. Due August 15, 2008 in addition to the PWSS progress report.**

**Outputs/Progress To Date**

- OEHS provided emergency response employees with cell phones and pagers.
- Purchased and distributed special portable radios for each OEHS DO.
- Summer intern updated the PWS emergency contact database information.
- OEHS assisted with the introduction of WV WARN during the 2008 WVRWA Annual Conference in September 2008, including exhibit, presentations, and introductory session.

**Future Plans**

- Continue providing cell phones and pagers to appropriate OEHS emergency response personnel.
- Purchase additional special portable radios for OEHS use.
- Perform annual update of PWS emergency contact information database information by hiring a summer intern.

- OEHS will continue actively supporting WV WARN’s mission and activities.

**Outcomes/Benefits (Lessons learned, if any)** [EPA Order 5700.7 to specifically identify outputs and outcomes]

- Rapid response abilities during threat and/or emergency situations are improved through cell phones and pagers.
- Emergency radios provide communication with state central emergency operation centers during adverse conditions when cell and land line phones and pagers are inoperable.
- Accurate emergency contact information increases the ability to rapidly dispense critical homeland security messages or alerts to key PWS personnel.
- OEHS supported WV WARN Steering Committee efforts and activities, including promotion, website design, and development of a Mutual Aid Agreement (MAA).

**Task 6.3**

**Status of Grant Expenditures** [Breakout dollar amounts per activity or budget categories, e.g. DWSRF]

**Former Expense:** [Explain reason(s) for slow drawdown of funding]

There have been numerous reasons for slow drawdown of funds, including:

- Staffing vacancies – this not only impacts the salary of vacant positions, but also the fringes and indirect charges.
- Travel Expenses – due to vacant positions.
- Supplies – due to vacant positions

Supplemental work activities are gaining significant momentum the first half of the year. Over \$3,886,000 has been committed for the proposed supplemental work activities. Expenditure rates should increase over the next 6 – 12 months.

**Current Year Expense:**

This was reported in the DWSRF annual report that was submitted in September 2008.

**Future/Projected Expense:**

Please refer to the “WV DWSRF Set-Aside Progress Activity Report for Time Period July 1, 2008 – December 31, 2008”, submitted under separate cover, for future/projected expense.

## **7. Operator Certification Expense Reimbursement Grants (ERG)**

**Separate Guidance has been issued for these grants. Use this space on the Checklist to capture the funded activities and use this tool for reporting purposes. NOTE:** Environmental Results provisions do not apply to these grants. These grants were awarded prior to EPA Order.

**Goal 2:** Safe and Clear Water--Ensure drinking water is safe. Restore and maintain oceans, watersheds and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants and wildlife.

**Objective 1:** Protect human health by reducing exposure to contaminants in drinking water (including protecting source water), in fish and shellfish, and in recreational waters.

**Subobjective 1:** Water safe to drink

**WV contribution to FY'09 Measures:** **Goal 2.1.1: 90% of the population served by community water systems (CWS) that receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection.**

**SP-1: 90% of the population served by CWS that received drinking water that meets health-based standards. SP-2: 95% of person months during which CWS provide drinking water that meets all applicable health-based standards.**

**NOTE:** State is required to give "detailed" narrative of work being performed and on the "progress" being made under each funded set-aside. Listing activities in one or two sentences does not give a complete picture. State's narrative should tell a story, connecting the information from previous reports to current. EPA also suggests including numbers where ever it is feasible ( e.g. # of courses held) and discuss results or effectiveness of activities being performed. **Submit progress activity report covering July 1 – December 31, 2008 that reflects financial status and time schedule for expended all grant funds by the end of the project period. Due February 15, 2009 in addition to the PWSS progress report.**

### **Task 7.1 e-Training**

**Trainings held for small system operators to receive CEH hours**

#### **Progress To-Date**

Contracted with 360 Water, Inc. through August 30, 2008 to provide free, online CEH training for small system water operators; however, no operators received this training during this reporting period.

#### **Future Plans** [Discuss plans to revise workshop to include other activities]

As of January 1, 2009, will contract with Suncoast Learning Systems, Inc. to continue providing this type of training through December 31, 2009.

**Benefits (Lessons learned, if any)**

Suncoast Learning Systems, Inc. provided online CEH training for water and wastewater operators on the WVRWA website prior to our contract. By contracting with them for small system operators, we were able to lower the cost of 11 different courses (102 total hours) for all operators at least through the contract duration. This team approach will support increased awareness of this resource.

**Task 7.2****In-house Internet Training and Web CT review****Progress To-Date**

- Contracted with eTrain Online, Inc. (EHS80365), through August 31, 2008, and renewed September 1, 2008 through August 31, 2009 to develop a WV Basics Course. This course is a technology-based interactive distance education course, available on CD-ROM or online, for free CEHs to all water operators. The WV Basics Course consists of seven separate CEHs totaling 9.5 hours.
- Contracted with ColorID, LLC (EHS80372 in the amount of \$47,703.80) to purchase and set-up a new photo identification card system to better serve certified operators. On October 1, 2008, \$42,713.80 was spent to set up the systems at the central office and each DO location. On October 16, 2008, \$4,990 was spent on technical support and maintenance.
- Submitted a Request For Quotation (RFQ) to the State Purchasing division in November 2008 for a vendor to develop a WV Advanced Course, to also be available on CD-ROM and/or the internet, for additional free CEHs to all water operators.
- Purchased a computer for each DO (five total) dedicated to electronic operator training.

**Future Plans**

- Advertise and utilize WV Basics and Advanced Courses.
- Complete RFQ and contract for WV Advanced Courses by December 31, 2009.
- Purchase a CD-ROM duplicator to support WV Basics Course and Advanced Course availability once initial inventory is depleted.
- Develop a 1D certification course in WebCT platform by in-house staff when personnel can support this effort in addition to current job duties.
- Purchase digital projectors to support electronic training needs.

**Benefits (Lessons learned, if any)**

### **Task 7.3**

#### **Backflow Prevention Assembly Test(s)**

### **Progress To Date**

- Two week-long initial certification courses and two, one-day refresher certification courses were held for BPAITs (contract with WVETC).
- A total of 44 BPAITs were certified or recertified and certificates were issued.
- Maintain a website with currently certified BPAITs in WV (<http://www.wvdhhr.org/oehs/backflow/default.aspx>).

### **Future Plans**

Continuation of contract with WVETC to provide required training.

### **Benefits (Lessons learned, if any)**

### **Task 7.4**

#### **Status of grant expenditures** [Breakout dollar amounts per activity or budget categories, e.g., DWSRF]

### **Former Expense:** [Explain reason(s) for slow drawdown of funding]

- Work plan conception ideas and associated costs did not match the actual implementation of each project.
- Various and increasing staffing vacancies within OEHS and state purchasing have created delays in completing projects and drawing down funds.
- Changes in purchasing procedure and the learning curve associated with proper protocol.

### **Current Year Expense:**

As of September 30, 2008, OEHS cumulatively spent \$226,595.41 with an unobligated balance of \$1,211,303.59.

**Future/Projected Expense:**

Continue to implement the approved Expense Reimbursement Grant (ERG) workplan. More specifically, the following projects:

- Training Trailer
- Water Operator Career Awareness Campaign
- In-house electronic equipment to support new water operator training resources
- Revision of SWOCS database